

**Bristol Bay, Alaska**  
**Comprehensive Economic Development Strategy**

**June 30, 2003**

**of the**

**Bristol Bay Native Association**  
**P. O. Box 310**  
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Funded with an Indian Planning Grant received from the U. S. Department of Commerce,  
Economic Development Administration

**BRISTOL BAY NATIVE ASSOCIATION  
P.O. BOX 310  
DILLINGHAM, ALASKA 99576  
(907) 842-5257**

Resolution 2003 -07

**BBNA's JUNE 30, 2003  
COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY (CEDS)**

WHEREAS, Bristol Bay's commercial sockeye fishery is in the worst shape it's ever experienced in history, and

WHEREAS, both the state and federal governments declaring the fishery an economic disaster in 1997 and 1998, and the state of Alaska declaring the fishery an economic disaster in 2001 and 2002; and

WHEREAS, BBNA's latest CEDS document identifies the need to update a Bristol Bay Economic Recovery to assist the region with it's economic recovery efforts; and

WHEREAS, BBNA's CEDS identifies the need to establish an USDA Intermediary Relending Program revolving loan fund to assist area residents purchase limited entry permits and startup small businesses; and

WHEREAS, the document identifies a growing interest in the region for area residents to diversity into the region's growing tourism industry; and

WHEREAS, BBNA's Comprehensive Economic Development Strategy (CEDS) Committee has reviewed and approved BBNA's June 30, 2003 CEDS document on April 22, 2003 in Dillingham, Alaska; and

NOW THEREFORE BE IT RESOLVED by the Bristol Bay Native Association that BBNA's Board of Directors have reviewed and hereby approve BBNA's June 30, 2003, Comprehensive Economic Development Strategy document.

Signed: \_\_\_\_\_

President/CEO

**CERTIFICATION:**

I, the undersigned Secretary of the Bristol Bay Native Association, do hereby certify that the foregoing resolution was duly passed the majority vote of the Board of Directors of the Bristol Bay Native Association at a duly called and noticed meeting this 22 day of April, 2003 and that a quorum was present.

Signed: \_\_\_\_\_

Secretary

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## **ACKNOWLEDGMENTS**

This Comprehensive Economic Development Strategy (CEDS) has been made possible by an Indian Planning Grant No. 07-84-04815 awarded to the Bristol Bay Native Association (BBNA) by the U. S. Department of Commerce, Economic Development Administration.

BBNA's CEDS Committee must be recognized for meeting two times during the year to provide recommendations to BBNA's Planner on specific economic development projects to work on. They also reviewed and provided comments to this particular document. Without their input to the work activities of BBNA's Planner, this CEDS would not have been possible.

BBNA's Executive Committee must also be thanked for reviewing and giving approval of this document.

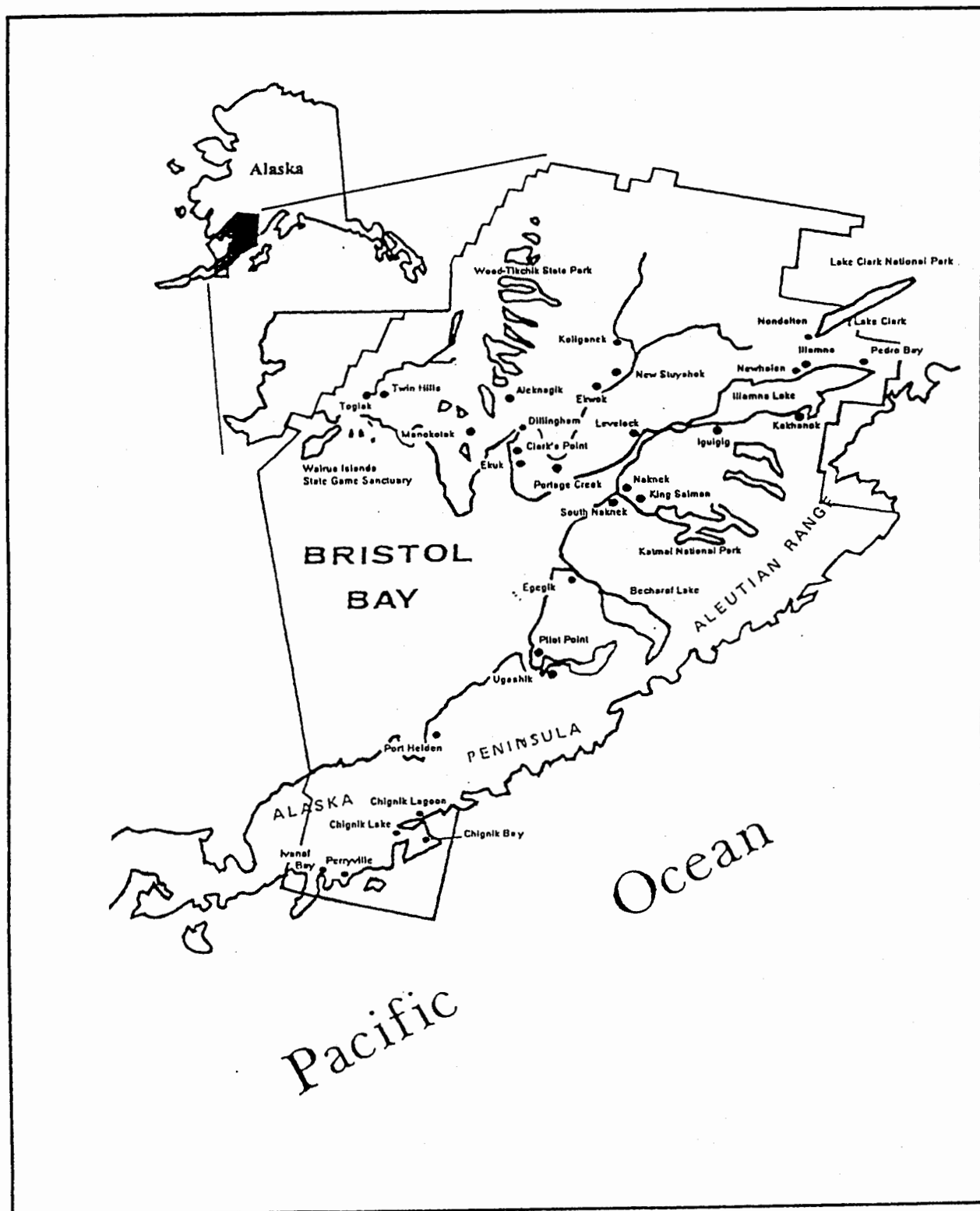
Thanks must also be given to the following individuals:

### **U. S. Department of Commerce, Economic Development Administration**

Regional Director, A. Leonard Smith  
Chief, Planning & Technical Assistance, Bettye J. Atkinson  
Community Planner, Lloyd P. Kirry  
Alaska EDA Representative, Bernard E. Richert, Jr.

### **Bristol Bay Native Association, Inc.**

BBNA's Chairman of the Board and Chief Executive Officer, Duwayne Johnson  
BBNA's Chief of Operations, Terry Hoeffler  
Chair, BBNA's CEDS Committee, Fred T. Angasan  
Program Manager, Economic Development, Andy Golia



*The Bristol Bay Region, Southwest Alaska.*

## **I. Executive Summary**

This document is a Comprehensive Economic Development Strategy (CEDS) for the Bristol Bay Native Association (BBNA). BBNA is a regional nonprofit corporation formed in 1967 that serves 10,300 tribal members enrolled to 32 tribal councils located in the Bristol Bay region of Southwest Alaska. BBNA's main office is located in Dillingham, Alaska.

### **The Region's Failing Fishing Economy:**

The region's main "economic engine" is probably in the worst shape it's been in history. Back in 1974, the region was declared an economic disaster, however that disaster declaration was only for one year. In the past 6 years, the region has been declared an economic disaster area 4 times. In 1997 and 1998, both the state and federal governments declared the region an economic disaster because of failed salmon returns. In 2001 and 2002, former Governor Tony Knowles declared the region a State economic disaster because of combined low salmon returns and weak prices. Other signs of economic distress include:

- Ten years ago the fishery had more than two dozen salmon buyers. Today that number is now down to about eight.
- On Dec. 12, 2002, Wards Cove, one of Bristol Bay's oldest and major salmon buyers, announced it would no longer buy salmon in Alaska; shutting down 9 plants statewide. The company shutdown 3 Bristol Bay plants and displaced 28% of all Bristol Bay salmon permit holders who fished in 2002. In total, it affected 536 permit holders.
- In January 2003, the Alaska Division of Investments reported that 43% of all the 160 fishing loans in the region are in arrears by one month or more. The Division is now foreclosing on 20 of these loans.
- BBNA's regional food bank in Dillingham is low with food because as an increasing demand by distressed fishermen.

### **Fishery Restructuring:**

Efforts are now underway by area fisheries leaders to restructure Bristol Bay's salmon fishery. The State Legislature is now considering legislation recommended by the Alaska Salmon Task Force to rebuild Alaska's salmon fisheries. The Bristol Bay Economic Development Corporation (the local Western Alaska Community Development Quota group) recently completed an in-depth analysis of restructuring options for the fishery. The Alaska's Commercial Fisheries Entry Commission is now conducting an optimum numbers study for the fishery to be completed in 2003. It's obvious that in order for Bristol Bay salmon fishermen to survive and compete against farmed salmon, they must find ways to improve salmon quality, reduce harvesting costs, and possibly reduce fishing effort.

**Bristol Bay Price Fixing Lawsuit:**

Today's primary discussion among local fishermen is a price fixing lawsuit filed eight years ago that is currently under trail in Anchorage. The trail began Feb. 8, 2003 and is expected to end in late May. Plaintiffs in this class action lawsuit (about 4,500 Bristol Bay fishermen) have alleged Bristol Bay salmon buyers have broken U. S. antitrust laws and filed for over \$1 billion in compensation. A dozen Bristol Bay salmon buyers and one major Japanese salmon importer have settled out of court, however those still remain in the case are major salmon buyers. According to Peter Pan's Norman VanVactor, a decision that requires the processors to even pay a fraction of that amount would put them out of business. Once a decision has been made in the case, it could very well be appealed, extending the final results of the lawsuit.

This particular lawsuit has the potential of displacing hundreds of additional Bristol Bay fishermen. If the processors are found guilty, word is out that they may be forced to declare bankruptcy.

**Disaster Assistance:**

Thanks to U. S. Congress, some disaster relief is forthcoming. In early March 2003, Congress approved a \$100 million appropriation to the U. S. Department of Commerce for fisheries disaster assistance. Out of this \$100 million, \$35 million will be made available to the State of Alaska to make payments to persons or entities that have experienced significant economic hardship. Funds will be used to provide:

- A. Personal assistance with priority given to food, energy needs, housing assistance, transportation fuel including subsistence activities, and other urgent needs;
- B. Assistance for small businesses including fishermen, fish processors, and related businesses serving the fishing industry;
- C. Assistance for local and borough governments adversely affected by reductions in fish landing fees and other fishing-related revenue; and
- D. Product development and marketing. \$20 million will be provided to develop an Alaska seafood-marketing program with 20% earmarked for the Alaska Seafood Marketing Institute to promote Alaska seafood.

**Bristol Bay Economic Recovery Plan:**

In the past two years, BBNA's senior management (with assistance from BBNA's Planner) has drafted and has continually updated a Bristol Bay Economic Recovery Plan. This particular plan is used by BBNA as a working document to obtain funding for certain economic recovery projects in the region. BBNA strongly believes these projects must be funded to assist the region with its economy recovery efforts. Terry Hoefflerle, BBNA's Chief of Operations, continues to use the document to urge local legislators, Alaska's congressional delegation, and state and federal governmental agencies to assist the region



rebuild its economy. He has submitted this plan to U. S. Senator Ted Stevens on two occasions (see copy of recovery plan in Section III).

### **The Region's Growing Interest in Tourism:**

With the region's fishery failing, there's a growing interest by area villagers to diversify into the area's growing tourism industry. Villagers want to start up bed and breakfasts and take obtain their U. S. Coast Guard 6-pak licenses. A growing number of communities want to establish cultural centers, and set up one or two day village tour packages.

Past attitude surveys among village leaders clearly indicate they favor developing Native cultural and ecotourism activities. These are two types of tourism activities considered most acceptable to area villagers. Both are non-consumptive in nature, and if properly developed, can provide a growing number of job opportunities to young villagers.

Too often visiting tourists would land at airports, then they are whisked off to sport fishing or hunting lodges. Very few of them would visit nor spend money in the villages. To attract tourists to hub communities in the region, an effort has been under way to establish cultural facilities and museums in Iliamna, Naknek/King Salmon, Dillingham, and Togiak. Two communities, Aleknagik and New Stuyahok, have recently emerged indicated an interest in constructing cultural facilities.

Sport fishermen and big game trophy hunters make up the greatest number of tourists in the region. In the Lower Kuskokim and Bristol Bay area, there are as many as 200 lodges, many of who cater to sport fishermen and hunters. It's with these lodges and lodge owners the villagers must work with to prepare village tours.

It's evident that village tours, such as those conducted in Togiak (under sponsorship of BBNA and former Tourism Development Planner Lois Sorensen), helps to supplement the Native arts and crafts industries in the villages.

### **The Region's Mineral Potential:**

In the past 12 years, recent mineral discoveries have been made in the region. In 1991, the Cominco mining company announced the discovery of a world-class copper/gold deposit called Pebble Copper near Iliamna. In 1998, NovaGold Resources Inc. announced a million-ounce gold discovery in the Shotgun Hills area of the Upper Nushagak River. In 2001, the U. S. Geological Survey (working in conjunction with BBNC and DuPont) collected and analyzed samples of surface minerals in the region, and black sand deposits were found in the region containing titanium oxide.

The "crown jewel" of mineral development in the region is Pebble Copper. Teck Cominco, owners of Pebble Copper, have agreed to allow Northern Dynasty, a junior mining

company, conduct further exploratory work on this world class copper and gold deposit that is located 17 miles northwest of Iliamna. Their agreement provides options for Northern Dynasty to purchase and further develop the deposit. Last spring Northern Dynasty drilled over 40 core samples south of the deposit with positive results - essentially doubling its size.

In early April 2003, Northern Dynasty announced that the deposit is now economically feasible to develop primarily because greater concentrations of gold have been found to exist within the deposit than previously analyzed.

If the mine is developed, it will not only become Alaska's largest open pit mine, but comparable to among the world's largest mines. Teck Cominco initially estimated that the deposit contained 1 billion tons of ore that could be extracted at 30,000 tons per day for 20 years. These numbers will now increase with the added discoveries in the area. The quality of the copper found in the area is considered low grade, however its deposit is very large. Mining experts expect it will take 10 to 12 years to develop the potential mine.

#### **BBNC's Mineral Mapping Project:**

One of BBNC's subsidiaries, the Bristol Environmental and Engineering Services (BEES), wants to produce a mineral-mapping project of the region's mineral deposits. BEES plans to seek state, federal, and Denali Commission funds to conduct a comprehensive mineral and hydrocarbon potential study for our region, and transpose this information into a computerized Geographic Information Systems (GIS) database.

BEES would like to quantify data collected for the past 30+ oil wells that have been tapped in Bristol Bay to see if there's any potential to develop natural gas in the region. It's been reported that some of the oil wells drilled in the past have hit natural gas reserves. If this resource were developed, it would mean cheaper energy, electricity and home-heating expenses for area residents.

#### **Southwest Alaska Vocational Technical Education Center:**

In light of the region's hundreds of displaced fishermen, there are an increasing number of villagers who want to be trained for alternative jobs. This signifies the importance of the Southwest Alaska Vocational Technical Center in King Salmon. The Center was built at the King Salmon Air Force Base that has been "mothballed." The facility can train area villagers to become carpenters, plumbers, welders, electricians, or operating engineers to land jobs. The Center can also cater to the health and technology training needs of area villagers.

#### **Community Economic Development Plans:**

Taking into account the region's disastrous fishing economy, there's a need for area communities to develop community economic development plans. The region has 30

communities and about 7 have long-term economic development plans that are either completed or soon to be completed. Community plans are generally a prerequisite for the funding of community infrastructure projects by the state and federal government agencies. Recently the Denali Commission refused to fund a number of health clinics in the region primarily because the communities failed to have community plans that make reference to health clinics.

In March 18-19, 2003, BBNA's 35-member board ranked the development of strategic community economic development plans as a high priority. As a result BBNA is seeking funds to hire 3 Community Development Planners or Economic Development Consultants to work with area communities to develop individual economic development plans. If BBNA is able to obtain funds for this purpose, BBNA will charge the planners/consultants to meet with village leaders to begin preparing the plans. The plans would identify both short-term and long-term needs as they relate to infrastructure development, cultural facilities, transportation, waste disposal, housing, and energy development. The plans will also identify community economic development potentials and recommend development strategies.

#### **Economic Development Barriers:**

The region must overcome two economic barriers. One is to find ways to lower the extremely high cost of living (among the highest in both the state and nation). The cost for home-heating fuel and electricity in many of the villages is four times as high as what Anchorage area residents pay. Villagers want to see oil companies explore for shallow natural gas reserves in the region. They also want to see the development of sustainable and cheaper alternative energy technologies in the region.

The other economic barrier is the region's high cost of transporting goods, materials, and people in and out of the region. There's no roads or railroads linking the region's communities to Anchorage. All goods must be flown in or shipped in by barges. Area villagers want 6,000' runways so goods can be flown in directly from Anchorage, and their salmon can be flown directly to both domestic and international markets. In the western part of the region, the State Department of Transportation (DOT) has no long-term plans for constructing roads between the communities. In the eastern part of the region, DOT has long-term plans for the construction of roads connecting Chignik to Egegik, however the projected costs are very high. Last year, both the King Salmon Traditional Council and the Bristol Bay Borough have passed resolutions in support of examining costs to construct a road or railroad from Anchorage to King Salmon.

## **II. The Tribal Organization Responsible for the CEDS Activity**

### **A. The Bristol Bay Native Association (BBNA):**

Organized in 1967, BBNA is a regional private non-profit corporation, which serves to protect and promote the physical, social, and economic well being of the Bristol Bay Native residents. BBNA is duly organized under Alaska State corporate laws, and serves 32 tribal councils and 10,100 tribal members.

BBNA's board of directors is made up of a representative from each of the thirty-two (32) tribal/village councils in the region, plus six (6) at-large members. BBNA's full board of directors generally meets twice a year, and the board selects a 10-member Executive Committee that meets regularly (about eight (8) times a year) to take care of business. BBNA's Executive Committee is fully authorized by resolution to act on behalf of BBNA's 38-member full board.

BBNA contracts with state and federal agencies to carry out social and human service programs in the region. In March 2003, BBNA had 355 staff members in full and part-time positions. BBNA has 261 staff positions in 31 village locations and 89 central office positions in Dillingham. These staff members administer and service various programs amounting to about \$16 million. BBNA currently compacts with the federal government to provide the following programs:

|                       |                    |                            |
|-----------------------|--------------------|----------------------------|
| adult basic education | higher education   | vocational training        |
| employment assistance | credit and finance | tribal government services |
| general assistance    | natural resources  | realty services            |
| economic development  | social services    | environmental protection   |
| Indian Child Welfare  |                    |                            |

In other federal government contracts, BBNA delivers vocational rehabilitation, Head Start, and an EDA Indian planning program. In regards to State contracts, BBNA provides a village public safety officer program, elderly nutrition, senior employment, Older Alaskans Commission training, jobs childcare, juvenile delinquency, and alcohol enforcement.

Within BBNA's organizational structure, BBNA's EDA Program is part of the Community Services Department. The Planner's supervisor is Terry Hoefflerle, BBNA's Chief of Operations. Mr. Hoefflerle reports on the Planner's activities to BBNA's Executive Committee and full board. During BBNA's full board meetings, the Planner prepares and submits a written report on the state of the region's economy.

The Planner also reports to BBNA's CEDS Committee, which usually meets twice per year – once in the early winter to provide recommendations on which projects to work on, and another in the spring to approve BBNA's Comprehensive Economic Development Strategy. When committee members are unable to attend the CEDS meetings in person, they

participate by tele-conference.

#### **B. BBNA's CEDS Committee and Planner:**

Currently, BBNA's CEDS Committee is made up of twelve members. Six members are appointed from BBNA's Executive Committee, and include:

| <u>Name</u><br>Appointment Date                 | <u>Community</u> | <u>Occupation</u> | <u>Race</u> | <u>Sex</u> |
|---|------------------|-------------------|-------------|------------|
| <b>Fred T. Angasan (Chair)</b><br>June 13, 1994 | South Naknek     | Fisherman         | AN          | M          |
| <b>Dennis Andrew</b><br>Dec. 13, 2002           | New Stuyahok     | Fisherman         | AN          | M          |
| <b>Wassillie Tukatuk</b><br>Dec. 13, 2002       | Manokotak        | Fisherman         | AN          | M          |
| <b>Molly Chythlook</b><br>Dec. 13, 2002         | Dillingham       | Fisherwoman       | AN          | F          |
| <b>Ida Apokedak</b><br>Dec. 13, 2002            | Levelock         | Homemaker         | AN          | F          |
| <b>Johnny Lind</b><br>Dec. 12, 1994             | Chignik Lake     | Fisherman         | AN          | M          |

Six additional members of the CEDS committee are made up of representatives from governmental organizations in the region and the private sector. They are:

| <u>Name/Affiliation</u><br>Appointment Date               | <u>Community</u> | <u>Occupation</u>     | <u>Race</u> | <u>Sex</u> |
|---|------------------|-----------------------|-------------|------------|
| <b>Tom Tilden</b><br>City of Dillingham<br>April 13, 1992 | Dillingham       | Fisherman             | AN          | M          |
| <b>Wanetta Ayers</b><br>SWAMC*<br>Dec. 13, 2002           | Anchorage        | Executive<br>Director | C           | F          |

| <u>Name/Affiliation</u><br>Appointment Date                       | <u>Community</u> | <u>Occupation</u>    | <u>Race</u> | <u>Sex</u> |
|---|------------------|----------------------|-------------|------------|
| <b>Marvin Smith</b><br>Lake & Peninsula Borough<br>April 19, 2001 | King Salmon      | Community<br>Planner | C           | M          |
| <b>George Castaneda</b><br>Bristol Bay Borough<br>Dec. 13, 2002   | Naknek           | Manager              | C           | M          |
| <b>Robin Samuelson</b><br>Bristol Bay Economic<br>Dec. 13, 2002   | Dillingham       | President/CEO        | AN          | M          |
| <b>Alice Ruby**</b><br>Choggiung Limited<br>April 20, 2001        | Dillingham       | Private Business     | C           | F          |

NOTE: \* = Southwest Alaska Municipal Conference, AN = Alaska Native (Eskimo, Aleut, or Athabascan), and C = Caucasian.

\*\* = Interim appointment. Tim Troll resigned from Choggiung Limited as Chief Executive Officer, and Choggiung Limited's new Chief Executive Officer has not appointed a new representative to date.

On Dec. 13, 2002, BBNA's CEDS Committee met and accepted the appointment of:

Dennis Andrew of New Stuyahok who replaced Margie Nelson of Koliganek  
 Molly Chythlook of Dillingham who replaced DuWayne Johnson of Dillingham  
 Johnny Lind of Chignik Lake who replaced Patrick Kosbruk of Perryville  
 Ida Apokedak of Levelock who replaced Howard Nelson of Levelock  
 Wassillie Tugatuk of Manokotak who replaced Tony Gregorio of Chignik Lagoon  
 Robin Samuelson of Dillingham who replaced Bob Darrough of Dillingham  
 Wanetta Ayers of Anchorage who replaced Lynda Billmeyer of Anchorage  
 George Castaneda of Naknek who replaced Arne Erikson of Naknek

Hired August 26, 1991, Andy Golia of Dillingham continues to work as BBNA's Economic Development Planner. Being a Bristol Bay commercial herring, halibut, and salmon fisherman, he works 9-months during the winter, then fishes during the summer months.

### **III. Highlights of Past Year's Planning Activities**

After taking 3 months leave-without-pay (as BBNA's Planner does every year to commercially fish herring and salmon), BBNA's Planner returned to work on July 30, 2002. Upon return to work, the planner updated the Indian planning program's goals and objectives (as BBNA does with all its programs biannually). On Oct. 8, 2002, BBNA's board reviewed and approved the goals and objectives. On Dec. 13, 2002, BBNA's Comprehensive Economic Development Strategy (CEDS) Committee reviewed the goals and objectives and made several changes. Below you will find the planning program's goals typed in bold; the objectives typed in bold and underlined, followed by the planner's work activities.

#### **A. Program Goals and Objectives:**

##### **1. Goal: Coordinate efforts with the Bristol Bay Economic Development Corporation (BBEDC) to secure markets for displaced local salmon fishermen who have lost their markets with salmon buyers.**

This is a new goal established by BBNA's CEDS Committee on Dec. 13, 2002. On Dec. 12, 2002, Wards Cove Packing Company (one of Bristol Bay major salmon buyers) announced it would close all its salmon buying and processing operations in Alaska. This company shutdown displaced over 500 salmon fishermen. The company owns a major processing plant at Ekuk and Naknek. BBNA's Planner received a number of phone calls from their displaced fishermen and offered them phone numbers of other salmon buyers willing to provide them with markets. He also drafted two resolutions urging both BBNA and BBEDC to secure markets for Igushik setnetters and Ekuk setnetters. Thanks to much of the work of Robin Samuelson of BBEDC, markets have been secured for the displaced setnetters.

##### **2. Goal: Actively participate in meetings that relate to the restructuring, economic recovery, and economic diversification of Bristol Bay's salmon fishery.**

This goal has been met. On Oct. 28, 2002, BBNA's Planner gave a guest presentation in the University of Alaska's "Alaska's Salmon Fisheries Restructuring Options Workshop" held at the University in Anchorage. In his presentation, the planner touched on the expected community impacts of restructuring Bristol Bay's salmon fishery. On Nov. 1, 2002, the planner testified before the Joint Legislative Alaska Salmon Task Force and provided recommendations on ways to help Bristol Bay's salmon fishery during their public hearing held in the Bristol Inn in Dillingham.

This winter, BBNA's Planner updated (with assistance from BBNA's senior management) a Bristol Bay Economic Recovery Plan to be submitted to U. S. Senator Ted Stevens by Terry Hoeflerle, BBNA's Chief of Operations. A copy of this economic recovery plan is included in this section of the CEDS document.

**Objective 2.1: Based on comments received from area fishermen, communities, and BBNA's senior management, prepare and submit BBNA proposals to the U. S. Department of Commerce, Economic Development Administration that would assist the region in its economic recovery efforts.**

The particular objective was put in place last fall based on U. S. Senator Frank Murkowski's (now Governor Murkowski) announcement that he's developed plans to secure \$100 million in economic disaster assistance. These funds will be made available through the U. S. Department of Commerce, EDA, and will be earmarked for displaced Alaskan commercial salmon fishermen. Congress approved the funding in early March 2003, and once the State of Alaska announces its availability, BBNA's Planner will submit appropriate grant applications.

**Objective 2.2: Supervise BBNA's new temporary Economic Recovery Planner to identify common economic projects and develop local economic development initiatives for 8 months or until May 30, 2003.**

Since August 2, 2002, BBNA has advertised for an Economic Recovery Planner, however has not been able to hire a qualified applicant. BBNA management met with one qualified applicant, however he chose not to take the position. BBNA's Planner then received approval from Mr. Daryl van Ness, Chief of Economic Adjustment in EDA's office in Seattle to allow BBNA to hire a consultant to meet the goals of this project. On March 1, 2003, BBNA signed a contract with the Stadem Group of Anchorage to complete this project.

**Objective 2.3: Supervise BBNA's new temporary Economic Summit Planner to develop plans to offer a virtual electronic Bristol Bay Economic Summit to be held in Dillingham during the fall of 2002.**

In 2002, BBNA's Planner secured \$20,000 from the Alaska Department of Community and Economic Development for BBNA to offer this Economic Summit. On August 2, 2002, BBNA began advertising for this position, however has been unable to find a qualified applicant. Then in late January 2003, the State Department of Labor approved BBNA subcontracting the work out. BBNA then contracted with Choggiung Limited of Dillingham and the Summit was held on April 23-26, 2003 in Dillingham.

**Objective 2.4: Work to establish a community assistance-planning program for the Bristol Bay region, in part to assist communities in securing grant funds from the Denali Commission and other governmental agencies to plan infrastructure development.**

This is a new objective BBNA's CEDS Committee approved on Dec. 13,



2002. BBNA's Planner has met with BBNA's management staff to discuss ways to secure funds for community planning. It was resolved on Feb. 20, 2003 that BBNA will seek USDA funds to hire several community planners and consultants to work on developing long-term community economic development plans in the region.

**3. Goal: Prepare a fall and spring report on market conditions for Bristol Bay salmon and herring for the *Bristol BayTimes*, KDLG radio station, and BBNA's *Newsletter*.**

This goal has been met. BBNA's Planner submitted a market update report on January 2, 2003, and another update on April 15, 2003.

**4. Goal: Assist area residents diversify into tourism.**

**4.1 Objective: Supervise BBNA's temporary Tourism Development Planner to develop and offer tourism small business startup workshops in Bristol Bay communities.**

This objective has been met. On Nov. 6, 2002, BBNA hired Mr. Kenny Wilson of Dillingham to work as BBNA Tourism Development Planner. He has offered 6 tourism developments workshops in Manokotak, Aleknagik, Clark's Point, Levelock, New Stuyahok, and Koliganek.

**4.2 Objective: Seek additional funding sources so that BBNA's Tourism Development Planner can continue to work beyond May 30, 2003.**

BBNA's Planner plans to utilize its unencumbered EDA Economic Adjustment funds to hire BBNA's Tourism Development Planner for five months beginning next fall.

**4.3 Objective: Organize regular meetings of BBNA's Bristol Bay Visitor's Council (BBVC) to discuss and identify ways area communities can take greater advantage of tourism opportunities in the region's growing tourism industry.**

This objective has been met. Since being organized in 1996, BBVC has met 22 times to date. On Dec. 2, BBVC held a scheduled meeting during BBNC's Village Leadership Workshop in Anchorage, Alaska, however a quorum was not established. BBVC then met again on March 14, 2003.

Thanks to the work of BBVC, by next spring, construction will begin on a \$600,000 Den'ina-oriented cultural facility to be built at the Iliamna airport. The U. S. Department of Commerce, EDA has agreed to contribute \$400,000 for the project, and the Lake and Peninsula Borough will provide \$200,000 in matching funds.

In regards to the Dillingham Cultural and Convention Center, the City of Dillingham, Curyung Tribal Council, and Choggiung Limited are now working on site selection for the facility. The group is now working on obtaining ANA grant funds to complete design work on the facility. Its initial projected costs have been estimated at \$4.9 million. Those involved with this project plan to seek a congressional appropriation for the project through U. S. Senator Ted Stevens.

**5. Goal: Organize at least two meetings this fiscal year of BBNA's Bristol Bay Alternative Energy Task Force (BBAETF) to examine changes in energy conservation technology and discuss possible ways to lower energy costs in the region.**

This goal is being met. Since becoming organized in 1996, the energy task force has met 12 times to date. It met again on Dec. 12, 2002 at the Bristol Bay Campus in Dillingham and on April 10, 2003 in BBNA's boardroom.

**6. Goal: Monitor mineral exploration work of the Pebble Copper project of the Northern Dynasty company near Iliamna; the Shotgun Hills gold discovery of the NovaGold company near the Tikchik Lakes area; the surface mineral assessment work being concluded by the U. S. Geological Survey in the Bristol Bay region; and BBNC's efforts to develop a Mineral Mapping Program for the region.**

This goal is being met. Last spring Northern Dynasty drilled 40 core samples south of the deposit with positive results - essentially doubling the size of the deposit.

If Pebble Copper is developed, it will not only become Alaska's largest open pit mine, but comparable to among the world's largest mines. It's been estimated that the initial deposit contained 1 billion tons of ore that could be extracted at 30,000 tons per day for 20 years. These numbers will now increase with the new find in the area. The quality of the copper found in the area is considered low grade, however its deposit is significant. Mining experts anticipate that it will take 10 to 12 years to develop Pebble Copper

BBNC's subsidiary, Bristol Environmental and Engineering Services (BEES) plans to seek state, federal, and Denali Commission funds to conduct a comprehensive mineral and hydrocarbon potential study for our region, and transpose this information into a computerized Geographic Information Systems (GIS) database.

BBNC has also worked with the Dillingham, Chignik, and Togiak village corporations to develop rock quarries on their lands. BBNC has worked with Far West in Chignik Bay to develop a rock quarry for their boat harbor; Choggiung Limited to develop a rock quarry for Dillingham's erosion control project; and

Togiak Natives Limited to develop roads in the community.

**7. Goal: Assist area entrepreneurs and small businesses with start-up, expansion, business transfers, and operational problems.**

**7.1 Objective: Coordinate efforts with Bernice Heyano of the Bristol Bay Economic Development Corporation to provide financial counseling and referral services to a minimum of 40 clients (including commercial fishers applying for boat and permit loans, or experiencing financial problems) by June 30, 2003.**

This goal and objective is being met. Since July 30, 2002, BBNA's Planner has assisted 17 clients with small business startup and financing information. He referred 9 of these clients to Bernice Heyano of the Bristol Bay Economic Development Corporation in Dillingham.

On Nov. 25, 2002, BBNA's Planner met with Terry Hoefflerle, BBNA's Chief of Operations, and senior staff Jeff Vance, Brenda Akelkok, and Daryl Moore to discuss plans for BBNA to submit an application to the U. S. Department of Agriculture's Intermediary Relending Program to startup a \$5 million revolving loan. This fund will be used to assist area fishermen purchase limited entry permits, and assist area residents with small business and tourism startup financing. BBNA plans to leverage these loan dollars with the Alaska Division of Investments primarily because the agency is able to secure permits as collateral.

**7.2 Objective: Assist the community of Perryville secure grant funds to install an ice machine in their community to service pacific cod fishermen in their community.**

On Dec. 10, 2002, Patrick Kosbruk of Perryville contacted BBNA's Planner, indicating their village is in need of an ice machine to offer ice for about 40 pacific cod fishermen in the area. Information on this project is covered in Section 5 of this document.

**7.3 Objective: Coordinate efforts with BBNA's senior management to convince the Small Business Development Center to establish an office in the Bristol Bay area.**

This is new objective approved by BBNA's CEDS Committee on Dec. 13, 2002. BBNA's Planner included information about this facility in BBNA's Bristol Bay Economic Recovery Plan (see plan in Section III of this document).

**8. Goal: Comply with all EDA reporting requirements and deadlines:**

**8.1 Objective: Organize two meetings of BBNA's Comprehensive Economic Development Strategy Committee in FY '03.** This objective is being met. BBNA's CEDS Committee met on Dec. 13, 2002 and again on April 18, 2003.

**8.2 Objective: Submit to EDA a Mid-Point Progress Report and Final Progress Report by Dec. 31, 2002 and April 31, 2003, respectively.** This objective was met.

**8.3 Objective: Submit BBNA's EDA Indian Planning grant application for FY '04 funding by April 31, 2003.** This objective was met.

**8.4 Objective: Submit an Update to BBNA's Comprehensive Economic Development Strategy by June 30, 2003.** This document meets this objective.

**Planner Travel:** Since July 30, 2002, BBNA's Planner completed the following travel:

\*Anchorage, Alaska on August 12-16, 2002 to attend BBNC board meetings.

\*Togiak, Alaska on August 26, 2002 to attend a Bristol Bay Native Corporation's Shareholders Informational Meeting.

\*New Stuyahok, Alaska on August 28, 2002 to attend a BBNC Shareholders Informational Meeting.

\*Clark's Point, Alaska on August 29, 2002 to attend a BBNC Shareholders Informational Meeting.

Kodiak, Alaska on Sept. 12-14, 2002 to attend the Southwest Alaska Municipal Conference fall meeting as BBNA's representative.

\*Anchorage, Alaska on Sept. 23-24, 2002 to chair a board meeting and strategic planning session of the Bering Sea Fishermen's Association.

\*Anchorage, Alaska on Oct. 21-29, 2002 to attend the Alaska Federation of Natives annual convention, BBNC board meetings, and the University of Alaska's Restructuring Salmon Fisheries Workshop.

\*Anchorage, Alaska on Dec. 2-7, 2002 to attend BBNC's Village Leadership Workshop and give a guest presentation updating participants about the Bristol Bay Visitors Council (BBVC), attending a BBVC meeting, and BBNC board meetings.

\* = BBNA's EDA Planning Grant did not pay these travel costs.

## **B. Bristol Bay Economic Recovery Plan:**

Over the past couple of years, BBNA's Planner has assisted Terry Hoefflerle, BBNA's Chief of Operations, prepare and update a Bristol Bay Economic Recovery Plan. This particular plan is used by BBNA to address the region's economic recovery efforts. The following is the latest plan:

### **BRISTOL BAY ECONOMIC RECOVERY PLAN FY 2004 Federal Funding Requests**

#### **Introduction:**

Bristol Bay is home to the most valuable commercial wild sockeye salmon fishery in the world. The importance of this industry to the region and its dependency upon the fishery cannot be overstated. Commercial fishing and salmon processing comprise about 88 percent of the region's economic base. However, there has been a series of disastrous fishing seasons in recent years that have had a significant cumulative adverse impact on the region's economy. People are leaving many of the Bristol Bay communities. Many businesses have already shut their doors and many more are literally on the brink of losing their continued economic viability.

The value of Bristol Bay wild salmon has been negatively—and perhaps irrevocably—impacted by foreign competition through the overproduction of farmed fish. The average price for sockeye salmon in the Bristol Bay Management Area, for example, dropped from \$2.25 per pound in 1989 to \$0.40 the last years. Overall, the ex-vessel value of the Bristol Bay salmon fishery was \$25 million last year, compared to more than \$200 million (\$305 million when adjusted for inflation) in 1989.

Over the last 6 years, the region has been declared an economic disaster 4 times. The Federal government declared the region a fishery failure under Section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act due to fishery disasters in 1997 and 1998. The State of Alaska declared the region an economic disaster due to weak salmon returns and poor prices in 1997, 1998, 2001, and 2002. In response to the severe economic distress faced by Alaska's fishermen and fisheries-dependent communities, the Federal government has committed \$100 million over the next several years to spur economic development and provide job training for residents in communities hard-hit by the current crisis in the salmon industry.

This plan aims to restructure and improve on the quality of Bristol Bay's salmon fishery, diversify the region's economy, and improve on critical economic development components to assist the region's economy to recover. There is a major concurrent initiative underway to assess both regulatory and fishery restructuring options to improve its long-term viability; however, it is equally important to pursue critical economic development opportunities important to the region's economy. These proposed projects, if funded, will help to spur the economic viability the region's communities.

Community and regional organizations representing various Bristol Bay region constituencies have met regularly over the past two years to develop recovery plans. Municipal and tribal governments, Native corporations, educational institutions, and nonprofit corporations throughout the region have contributed to this plan. Representatives from the Bristol Bay Borough, Bristol Bay Economic Development Corporation, Bristol Bay Native Association, Bristol Bay Native Corporation, Lake & Peninsula Borough, Southwest Alaska Vocational and Education Center, and others are participating in this important initiative.

### **Bristol Bay Economic Recovery Working Group:**

The purpose of the Bristol Bay Economic Recovery Working Group is to establish a coordinated and collaborative approach to help build a stable economic foundation for the region utilizing the best available local knowledge. Working Group members share a common goal of developing a knowledgeable and skilled population, strengthening community infrastructure, enhancing community capacity, creating dynamic local economies, and fostering healthy individuals and communities. The Working Group brings together a wide array of individual initiatives to help build diversified, self-sustaining local and regional economies in the region. The primary objectives of the Working Group in developing this plan are as follows:

- advance and promote long-term responsible development and the creation of job and other economic opportunities for the betterment of the Bristol Bay region, including its people, business, and communities;
- identify local and regional priorities, ensure that funding opportunities are used effectively and efficiently, are the result of regionally based planning, support common goals and objectives, and strengthen local and regional participation and decision-making;
- work with member organizations to identify and assess unique assets, capabilities, and capacities, develop plans for the region's economic recovery and development, target and meet the region's most pressing needs, and build community and regional unity and leadership;
- identify and leverage additional funds and technical assistance opportunities to carry out activities that foster economic growth and job creation on a far larger scale and result in a far greater local and/or regional benefit;
- support activities that are likely to be sustainable and have a long-term positive impact, generate or create opportunities for business development and job creation and retention, and promote self-sufficiency and diversification of regional and local economies;
- diversify and strengthen the region's economy by working with member organizations in the enhancement of existing businesses and development of new enterprises; and
- improve the employability of residents by collaborating with its members and other entities to provide education and training to local people for jobs within and outside the region.

### **FY 2004 Bristol Bay Economic Recovery Plan:**

The following economic recovery plan represents the first phase of a comprehensive, long-term economic development strategy. It focuses on regional economic development initiatives that are likely to have an immediate benefit and are time-critical in terms of sequencing subsequent phases. This plan offers a long-term positive impact to generate and create opportunities for business development and job creation and retention, and promote greater community self-sufficiency by developing planning, and diversifying the region's village economies.

### **Fisheries Restructuring and Recovery:**

This plan prioritizes fisheries projects because the salmon industry will always continue to play an important role in the region's economy. The Bristol Bay economy is intrinsically dependent upon commercial fishing and salmon processing. The industry comprises about 88 percent of the region's economic base, although gross earnings from salmon alone are down 79 percent over the

period 1995-2001. Without fundamental changes in Alaska's salmon regulatory and industry structure, as well as support for the region's infrastructure, the Bristol Bay economy remains at risk.

Training and employment assistance is ranked second because of the need to train and find jobs for hundreds of displaced fishermen and crewmembers. The region must diversify its economy because salmon returns will always fluctuate, and during weak returns, the region's economy will suffer. This plan spotlights effort to:

1. **Restructure Bristol Bay's fishery; improve upon salmon quality, and produce value-added specialty salmon products** so that Bristol Bay fishermen could survive as commercial fishermen and compete with farmed salmon in world markets, **and get salmon fishing permits back into the hands of area residents.**
2. **Offer training and employment assistance to the region's hundreds of displaced fishermen, crewmembers, and area residents.**
3. **Diversify the region's economy** by attracting tourists into hub and spoke communities; explore the region's mineral and hydrocarbon potential, develop a computerized mineral database to provide accurate mineral potential information to mining companies; develop small business development assistance centers, and develop 20-year community economic development plans.
4. **Assist the region to expand its telecommunications capabilities.**
5. **Improve on the region's transportation infrastructure needs** by addressing the construction of longer airports, docks and harbors, roads; develop low-cost alternative energy sources; and prepare community infrastructure development plans for the region's 29 communities.

#### **I. FISHERIES RESTRUCTURING:**

##### **A. Bristol Bay Restructuring Study:**

**\$100,000**

Bristol Bay fisheries leaders are currently working to examine ways to restructure Bristol Bay's salmon fishery. The fishery's current drift fleet is overcapitalized. There are too many high-tech fishing boats pursuing too few fish to afford a living income. Alaska's Commercial Fisheries Entry Commission is now conducting an optimum numbers study for the fishery. This study will determine the ideal number of boats for the fishery based on typical fishing expenses and projected future salmon prices. Once this study is done area fisheries leaders may begin examining various financing packages for a possible buyout program. With salmon prices expected to remain low, fishermen must find ways to reduce their harvesting costs or reduce overall effort.

The Bristol Bay Economic Development Corporation (BBEDC), the local Western Alaska Community Development Quota group, has recently completed an in-depth analysis of restructuring options for the fishery. This study is nearly completed, however BBEDC feels it needs an additional \$100,000 to receive comments from fishermen and complete final details of the study.

**B. Quality Improvement:****5 Ice Barges @ \$250,000 each:****\$1.25 million**

For Bristol Bay fishermen to compete on the world market, they must make huge improvements to salmon quality. Bristol Bay has a long history of producing poor quality salmon, and that reputation must be changed. BBEDC has been working to do exactly that. In 2001, BBEDC was awarded a \$600,000 Western Alaska Fisheries Disaster grant from the U. S. Department of Commerce, EDA to install ice machines in 6 of its member communities. As a match, BBEDC provided \$342,000. BBEDC also worked with Peter Pan Seafoods to set up a pilot "slush ice" program which enabled fishermen to receive 5 cents a pound more for their fish.

In Jan. 2003, the Alaska Salmon Task Force recommended the mandatory chilling of salmon at the point of harvest to improve on salmon quality in Alaska. While this legislation may not pass this legislative session, it will no doubt be reconsidered from time to time in the future. In response to this, BBEDC would like to acquire 5 ice barges for each of the commercial fishing districts of Nushagak, Togiak, Naknek, Egegik, and Ugashik.

**C. Value-added Processing Incubators/  
Seafood Industrial Parks (Dillingham, Togiak,  
Egegik, and Naknek):****\$No Estimates Available**

Today's world salmon market is no longer interested in frozen "headed and gutted" salmon. Instead it wants "ready-to-cook" meals such as skinless and boneless salmon fillets, smoked salmon, salmon soups, etc. Bristol Bay fishermen were paid \$.40 a pound for sockeye salmon the past two fishing seasons, and there is a growing number who want to learn how to produce value-added salmon products; however, they lack the knowledge and training to do so.

The small business incubators and seafood industrial parks will be used to teach fishermen about value-added processing without incurring prohibitive startup costs. Fishermen will be taught in small business incubators how to utilize "state-of-the-art" processing equipment used to produce value-added salmon products in compliance with DEC's seafood processing regulations. Technical assistance will also be provided in marketing, transportation, and accounting. BBEDC's Fisheries Infrastructure program can provide matching funds to these types of projects.

**D. BBNA's Revolving Loan Fund:****\$5 million**

Providing more financing opportunities to area residents is another important component to economic development. BBNA would like to establish a small business revolving loan fund to enable local residents to startup small businesses and purchase limited entry permits. BBNA is currently applying for seed money from the U. S. Department of Agriculture's Intermediary Relending Program, however the program has a cap of \$750,000. BBNA strongly feels it needs \$5 million to adequately jumpstart the revolving loan fund.

Because of the region's crashing fishing economy, there's a growing interest by area residents to diversify into the region's growing tourism industry. They want to start up small tourism businesses, such as bed and breakfasts, however many of them lack the credit history to qualify for loans.

BBNA also believes that now's the time for area residents to purchase salmon limited entry permits. Since 1975 the region has lost almost 40 per cent of its resident salmon



permits having a negative impact on the region's economy. Bristol Bay salmon drift permits values have plummeted from a high of \$248,000 in 1989 to about \$30,000 today, becoming more affordable for young residents. The region has many young people who are experienced crewmembers and can do well as captains. If they manage their money properly, have secondary jobs, and don't overcapitalize in the fishery, they can make it as commercial fishermen and contribute to their village economies.

## **II. EMPLOYMENT AND TRAINING:**

### **A. Southwest Alaska Vocational/Technical Center:**

**\$2 million**

With the region's economy in bad shape, the training of local residents for jobs is critical. According to a recent attitude survey conducted by the State Department of Labor, 40% of all Western Alaskan fishermen have given up hope on commercial salmon fishing. They want alternative jobs; however, to get them, they need training. Regional leaders have planned for this by working to establish the Southwest Alaska Vocational Technical Center in King Salmon. The Center can train area villagers to learn vocational skills such as carpentry, plumbing, welding, and electrical skills to land jobs. The Center will also be able to cater to the health and technology training needs of area villagers.

Bristol Bay's drift fleet effort usually numbered about 1,850 boats, however, it dropped to 1,535 boats in 2001 and down to 1,171 boats in 2002. Permit holders are giving up on the fishery, and seeking alternative jobs. With each permit holder generally hiring two crewmembers, this displaces hundreds of crewmembers. If they can't find jobs because they lack the training, then they are looking to receive training and education opportunities. This is where the opportunities offered by the Southwest Alaska Vocational and Technical Center proves invaluable. The center opened its doors for classes on January 2002, however is in dire need of operational funds.

### **B. Training Funding Backlog at BBNA:**

**\$700,000**

BBNA would like to continue to offer various training programs to Bristol Bay fishermen and residents at its Workforce Development Office in Dillingham. To date, the office has a backlog of clients who will not receive training opportunities if BBNA doesn't receive the additional funds.

## **III. ECONOMIC DIVERSIFICATION:**

### **A. Cultural facilities for Hubs – Gateway communities:**

**\$1.7 million**

In the last 3 years, several area communities have worked to establish cultural/visitor centers, namely in the "hub" communities of Dillingham, Iliamna/Newhalen, Naknek/King Salmon, and Togiak. Too often tourists who visit Bristol Bay are immediately whisked from the airports to surrounding sport fishing lodges. These facilities will be used to draw tourists into the communities and subsequently on to smaller surrounding communities. The centers will also offer meeting facilities for the communities.

**1. Dillingham:** Yup'ik Cultural Center. Gateway to the Togiak Wildlife Refuge and the Wood-Tikchik State Park. \$4.9 million project. Phase I = \$1 million. Sponsor/s are the City of Dillingham and/or Curyung Tribal Council.

**2. Togiak:** Expand existing cultural facility and add display/exhibit/store space. \$350,000 project. Sponsor is Togiak Tribal Council and City of Togiak.

**3. Iliamna/Newhalen:** Denai'na Cultural multi-purpose visitor/community center. Gateway to the Lake Clark National Park. \$150,000. \$600,000 already secured. Sponsor: Nulavena Tribal Consortium.

**4. Naknek/King Salmon:** Aluutiq Cultural Center. Gateway to the Katmai National Park. \$200,000 planning and development grant. Sponsors: Naknek/King Salmon Tribal Councils and the Bristol Bay Borough.

**B. BBNA Tourism Development Planner: \$300,000**

BBNA sees the need to hire a Tourism Development Planner for a 3-year period at \$100,000 per year to assist area villagers with the startup of village tours and small tourism businesses. The planner will provide residents with bed and breakfast startup information, how and where they can obtain their U. S. Coast Guard 6-pak licenses. The planner will also assist tribal councils and village corporations set up 1 and 2-day village Native cultural and ecotourism tour packages.

With the region's fishing economy in disarray, there's a growing number of area villagers who to diversify into the region's growing tourism industry, however they need assistance in the area of business startup. The planner will provide periodic tourism development workshops in the villages and work with area villagers on a "one to one" basis to assist them startup their tourism businesses. The planner will also work with area lodges and village leadership to offer area village tours.

**C. Development of Natural Resources Management Program: \$1.6 million**

The region is rich with natural resources upon which all area villagers rely heavily upon for subsistence purposes. It has the world's largest runs of sockeye salmon, and has all five major species of salmon - the chinook, sockeye, chum, coho, and pink salmon. In the Togiak area, it has the state's largest herring fishery, and a small halibut fishery. The area is abundant with caribou, moose, brown and black bears, migratory birds, marine mammals, and freshwater fish.

Considering the importance of natural resources to the area, BBNA would like to establish a Natural Resources Management Program in 2 of Bristol Bay's watersheds. BBNA would like to develop its technical capacity of Natural Resource Management programs in Bristol Bay, and to accomplish this, BBNA needs \$1.6 million through existing its compact over three years.

**D. BBNC's Mineral Development Project:**

Over the last 12 years, recent mineral discoveries have been made in the region. In 1991, the Cominco mining company announced the discovery of a world-class copper/gold deposit called Pebble Copper near Iliamna. In early April 2003, Northern Dynasty announced that the deposit is now economically viable to developed based on greater concentrations of gold found in the copper deposit. In 1998, NovaGold Resources Inc. announced a million-ounce gold discovery in the Shotgun Hills area of the Upper Nushagak River. In 2001, the U. S. Geological Survey (working in conjunction with BBNC and DuPont) collected and analyzed samples of surface minerals in the region, and black sand deposits were found in the region containing titanium oxide.

As a result of these discoveries, the Bristol Bay Native Corporation (the region's ANCSA regional corporation) would like to produce a computerized Geographic Information Systems Information (GIS) database of the region's mineral potential. This multi-phase

program will consist of the digitization of current mineral information, data interpretation, and the production of maps for key quadrangles in the region. Once completed, this information will be made available to mining companies for the purpose of conducting further exploration work in the region.

These funds will also be used to document the region's hydrocarbon potential. In the past, there's been more than 30 oil wells drilled in the region by oil companies with some wells hitting known gas reserves, and BBNC would like to quantify this information.

**E. Dillingham Small Business Development Center: \$743,632**

The creation of small businesses in the region's villages is critical to improving upon village economies. These centers will assist area residents in their efforts to startup small businesses. They will assist locals to develop small business plans and marketing plans for grocery stores, small engine repair shops, ATV rental shops, bed and breakfasts, skiff and outboard motor rentals, sport fishing operations, charter operations, etc.

The University of Alaska, Anchorage, has calculated that it will cost \$185,908 per year to operate a Dillingham Small Business Development Center for a year. BBNA would like to work with the Small Business Development Center (SBDC) and USDA to co-locate an office in Dillingham for the next 4 years.

**IV. Improving Internet Technology & Marketing:**

Improving telecommunications is an area of economic development that must not be ignored. BBNA recognizes the need to strengthen this service in the region. Many villagers do not have access to the Internet in their remote communities. The issues related to introducing new computer technology to our people results in many villagers not knowing how to properly operate computers.

**A. Improving Internet Technology & Access: \$736,000**

Given that economic growth and diversification are directly related to the rate of adoption of modern telecommunications technologies, the potential economic, political, social and educational benefits to the region are difficult to overstate. At a minimum, each village council office in the region needs the equivalent of an Internet café to serve as a technology-training center and entrepreneurial incubator for fostering business development and data management industries, and a locus for intra-regional government. Hardware costs per village for a minimum of five single-satellite-dish driven terminals networked to the existing school and clinic infrastructure for after-hours video-conferencing is \$15,000; software and training needed per village is \$8,000. Total for 32 tribal councils amount to \$736,000.

**B. Internet Marketing: \$316,500**

BBNA sees an opportunity to vastly improve on Native arts and crafts sales and tourism-related businesses in the region's communities via the Internet. BBNA would like to set up a website that promotes Native arts and crafts and tourism-related businesses in the village for a three-year period at a cost of \$105,500 per year.

**1. Promoting the sale of Native arts and crafts from the region:**

Native arts and crafts production continues to play an important role to the income of many villagers in the region. Bristol Bay villagers are known to produce excellent Native arts and crafts products. Togiak, Manokotak, and Aleknagik villagers are known for their

excellent work in sewing squirrel parkas, ivory carving and weaving grass baskets. The Nushagak area villagers are known for producing excellent fur caps, gloves, etc., and the Den'ina Athabascans in the Iliamna Lake area communities are known to produce excellent birch baskets and beadwork.

## **2. Promoting Sustainable Tourism Businesses in the region:**

This project will also assist Bristol Bay tourism businesses by promoting their Native cultural or ecotourism services on this website as to provide information to on-liners about their businesses. Back in 1996, the BBNA surveyed all its 32 tribal councils and their attitudes towards tourism. Most indicated preference for Native cultural and ecotourism activities over sport hunting and fishing. The Bristol Bay Native Corporation (the region's profit-making corporation formed under the Alaska Native Land Claims Settlement Act) also conducted a similar survey among the region's village Corporation's leaders, and the results were the same.

## **C. Information Technology Contracting:**

8 (a) contracting with federal agencies is an area that would take advantage of our labor pool and the competitive advantage available for sole source contracting as an 8(a) tribal entrepreneur. BBNA would like to work with the General Services Administration Federal Technology Service and its "BizNet" division to develop 8(a) contracting opportunities once telecommunications infrastructure is in place for our Bristol Bay villages. Contracting to perform business support via digital technology will enable our membership to earn incomes without relocating from their villages.

# **V. INFRASTRUCTURE DEVELOPMENT:**

## **A. Transportation:**

BBNA views improving transportation in our region as a critical corner stone to promoting economic development. It results in improved access; lowers the cost of living; increases export opportunities; enhances mineral, oil, and natural gas exploration and development (which will lower our region's extremely high energy costs), and will help to stimulate economic activity in our region. With the Bristol Bay area having been declared an economic disaster four out of the last six years, there's a strong need for employment opportunities in our region.

BBNA ranks addressing the fisheries transportation infrastructure needs in the region as a high priority. Despite the fishery experiencing severe economic problems, the fishery will continue to play a vital role in the region's economy.

## **1. All-tide docks, boat ramps, and staging areas:**

The region's salmon fishery once had as many as 24 salmon buyers (many of whom were floating processors) however we're now down to about 7 or 8 salmon buyers (now mostly shored-based processors). If Bristol Bay's salmon runs begin to rebound and the returns come back strong, we envision the need to move salmon as quickly as possible from tenders to either on-shore processing plants or airports for shipment to world markets.

Improving access for cargo and fish delivery is essential for our coastal fishing communities - not only to stimulate local economic activity and create jobs, but to also improve upon raw fish landing taxes. The region's lack of all-tide docks, boat ramps, and staging areas also has a direct impact on salmon quality. At times, salmon tenders must wait

up to six (6) hours on Bristol Bay's high tidal conditions before they can deliver salmon to shore-based processing plants. Many of our coastal villages that get freight via barges during the summer months need larger facilities and staging areas to accommodate the transfer of freight.

**2. Togiak Dock & Staging Area:**

**Cost must be Determined**

The city of Togiak would like to construct a dock and staging area in their village to enable barges to offload cargo in their community. This facility will be constructed near the community's old cannery.

**3. Togiak All-tide Boat Ramp, Staging Area, and Access Road:**

**Cost must be Determined**

The city of Togiak has plans to construct an access road to a deepwater site located west of the village and would like to construct an all-tide boat ramp and staging area at the site. This project would enable the community to improve their access to the fishing grounds to help diversify their fishing economy. The Togiak fishing district not only produces salmon and herring but is rich with shrimp, crab, yellowfin sole, sea cucumbers, sea urchins and other species. Without these combined projects, Togiak fishermen must wait on tidal conditions to access shore-based plants and their community airport.

**4. Dillingham All-tide Dock:**

**\$4.1 million**

The City of Dillingham has plans to construct an all-tide dock. This dock will be build where the old Dillingham Cold Storage dock currently exists and is no longer being used. It will be located adjacent to the existing container dock. It will extend seaward 100 feet beyond where the old cold storage existed, and the face of the dock will reach the minus 4 foot tide mark for the area. It will be build out of steel and be 5 feet lower than the old cold storage dock to facilitate greater cargo handling for the community – determined at up to 18 hours per day.

**5. Chignik Public Dock:**

**\$4 million**

Despite being a hub community for 5 communities in the Chignik area, this community does not have a public dock. This project will construct a new public dock/port facility that consists of an all tide, deep draft, 300 foot heavy capacity dock, boat lifts, eight acres of uplands for storage, cargo handling, fish processing and boat repair, and facilities to accommodate the Alaska Marine Highway System. The design and permitting process are nearly complete.

**6. Naknek All-Tide Dock:**

**\$5 million**

The Bristol Bay Borough wants to construct an all-tide dock in Naknek. Plans for this facility will include temporary boat mooring accommodations. The face of the dock structure will extend to the edge of the existing river channel to accommodate limited capacity low tide access. Basic services provided at the facility will include fuel, water, ice and electricity to the dock structure. It will also provide upland development facilities that will include as a minimum: Public parking, restrooms, laundry, showers and fish processing. The site should ideally be located such that additional land area is available to include future expansion and development for value-added fish processing and other related commercial development. Preliminary project design and construction cost goals are to be about \$5 million.

**7. Perryville Cargo Dock:****Estimated @ \$1.8 million**

The community of Perryville has been trying for years to obtain funds to construct a cargo dock near their community. To date the community uses a towed landing craft that is park on the beach in front of the village to haul cargo, however this barge cannot be used during windy onshore conditions. The community would prefer to use steel pilings to construct the dock, however is willing to utilize interlocking metal sheets filled with cement to haul cargo on. The construction of this dock would enable the ferry system that travels between Chignik and Sand Point to stop at their community.

**B. Airports: 6,000-foot runways in each commercial fishing district:**

Area communities want 6,000' runways so goods can be flown in directly from Anchorage instead of being shuttled through hub communities, and salmon can be flown directly to both domestic and international markets. These 6,000' runways are considered critical to communities in the western part of the region because the State Department of Transportation (DOT) has no long-term plans for construction of roads between these communities. Every major fishing district in our region should have at least one 6000' airstrip, paved and lighted to enable the movement of fish and heavy cargo into and out of that district.

Many villagers pay in excess of 200% for the same loaf of bread or gallon of milk, etc, when compared to Anchorage's store prices (most "fresh items" are simply not available). Fuel oil and gasoline follow suit with costs per gallon well in excess of \$2.50 to \$4.00. Extremely high electrical costs are yet another direct result of short airstrips, due to limitations on the number of gallons smaller aircrafts are able to transport on a "per flight" basis. Additional flights have to be made to fly-in fuel in sufficient quantities to get the smaller communities through the winter months. This drives the costs up dramatically.

Villagers in our region who live only a few miles apart are unable travel to the village "next door" due to costs of flights or lack of scheduled air transportation. Not only is this a safety issue, the lack of adequately sized runways limits the size/capacity of aircraft that can be used to provide needed fuel, groceries and deliver and/or back haul freight (fish). The result is a lower standard of living due to a much higher than average "cost of living".

In regards to 6,000 runways in each of our 5 commercial fishing districts, in the Nushagak district, Dillingham has a 6,400-foot airport. In the Naknek/Kvichak district, King Salmon has a cross-strip airport that measures 4,000 feet and 8,500 feet respectively. In the Egegik district, the community of Egegik recently had a 5,600-foot airport constructed. We see a need to construct 6,000-foot airports in Togiak to serve the Togiak district; Pilot Point to serve the Ugashik district; and Clark's Point, which is located at the center of the Nushagak district, to help serve that particular district.

**1. Togiak Airport Extension  
and Cross-strip Completion:****Cost Must be Determined**

The community of Togiak, which is the second largest community in the region, would like to complete the extension of the cross-strip that is currently closed. The Bureau of Indian Affairs recently upgraded the roads in the community, and began to construct a cross-strip however did not complete the project because funds were exhausted. The cross-strip is only 1,920 feet long. The community has a 4,400-foot east and west airport that should be extended to 6,000 feet to accommodate "Herc-able" cargo planes to fly salmon out from the community.

**2. Chignik Airport Lighting & Resurfacing:****\$1.4 million**

The community of Chignik would like to install airport lighting and resurface its 2600' x 60' runway, taxiway and apron with 9" of new gravel.

**3. Clark's Point Airport Completion & Extension:****Cost must be Determined**

In 2002, DOT began constructing a new airport in this community, which is located in the hub of Nushagak's commercial fishing district, however had to stop its construction because a section of the airport kept settling. This particular airport should be completed and extended to accommodate large cargo planes to land in the community and fly fish out.

**4. Pilot Point Airport Extension:****Cost must be Determined**

The community of Pilot Point serves as the hub community for the Ugashik commercial fishing district. It recently had a new 3,280-foot airport constructed, however the community needs an airport that is at least 6,000 feet long to enable large cargo planes to fly salmon out.

**C. Roads:**

Roads should be constructed from hub or regional airports to villages nearby. Villages need to be & deserve to be connected by road, if not to the outside "road system" at least to the closest hub or regional airport. In many cases, four wheeler trails exist between villages and usually follow the best routes due to local knowledge of the terrain, impacts from rivers, winds, etc. Many of these trails should be examined and where possible, improved and made into at least seasonal roads adequate enough to transport fuel and freight over during the summer and fall.

**1. Williamsport/Pile Road:  
(including port facilities)****Roads \$10 million/  
Corps \$3.9 million**

The Lake and Peninsula Borough has been working to get the Williamsport-Pile Bay road and bridge upgraded. This one-lane road has been used to haul Bristol Bay commercial fishing boats between the Cook Inlet area and Bristol Bay, however the bridge is too small to accommodate most of today's larger 32' vessels. Plans are to make it a two-lane road and increase the size of the bridge to accommodate larger boats. To improve on accessing the road at Williamsport on the Cook Inlet side, the Army Corps of Engineers would need to dredge the area. Once this route is upgraded, freight costs to the Iliamna Lake area communities is expected to decrease substantially. The Lake and Peninsula Borough has agreed to maintain the road.

**2. Iliamna/Nondalton road:****\$5 million**

This DOT project will complete the road link between the communities of Iliamna, Newhalen, and Nondalton. The project has been "work in progress" since the 1970's and the road is substantially complete for 13 miles to the proposed bridge site at the Newhalen River. The project consists of road improvements from the Iliamna airport to the bridge site (13 miles), a one-lane bridge over the Newhalen River, and significant improvements for the remaining 2 miles to Nondalton. Engineering and permitting activities are almost complete.

### **3. Anchorage to Bristol Bay road/railroad feasibility study:**

Many in Southwest Alaska support some type of ground transportation connection to Alaska's road system or rail-belt. Such a connection is discussed in the Southwest Alaska Transportation Plan and should be pursued with Federal dollars as soon as practical. If the mineral exploration now occurring within the region proves to be viable, serious consideration must be given to a transportation inter-tie to either the road system or the railroad. The community of King Salmon fully supports the construction of a road or railroad from Anchorage to their community. This particular feasibility study should include documentation of village support from communities that are expected to be impacted (i.e. resolutions of support from all the Iliamna communities).

#### **D. Expand the Alaska Ferry System in Bristol Bay.**

While Southeast, Southcentral, and Alaskan Peninsula communities located on the Gulf of Alaska enjoy the benefits of the Alaska Ferry System, no benefits are realized in Bristol Bay. Once the Williamsport/Pile Bay road and bridges have been upgraded, and dredging is completed at the Williamsport site, then the Alaska Ferry System can offload passengers and vehicles at Williamsport.

In the future, there's a need to take a serious look at expanding the Alaska Ferry System into Bristol Bay served by the "Blue Canoe" to Naknek's deepwater dock. From that deepwater dock, smaller, high-speed ferries can be utilized accessing communities around Bristol Bay and up the Kvichak River to Iliamna Lake area. It makes sense to incorporate more, smaller, high-speed ferries to enable service to the Bristol Bay area.

#### **E. By-pass Mail:**

Other than improving transportation needs, there's a need to protect "by-pass mail". Communities depend upon the bypass mail rates to help keep the cost of living down. Tons of groceries and supplies are mailed annually to all the villages. It is imperative that the intent of the original by-pass mail provision to reduce cost be maintained.

#### **F. Alternative Energy:**

##### **1. Wind Resource Monitoring Project:**

**\$300,000**

This project will provide wind-monitoring systems for a period of 2 or 3 years in 10 Bristol Bay communities at a cost of \$30,000 per site. Wind anemometers will be installed in the communities to document wind data baseline information to be used to help determine the feasibility of wind farms. The cost for electricity in region is among the highest in the state. Dillingham residents pay twice the amount electricity per kilowatt-hour than Anchorage residents, and in some of the more remote villages, it could be four times as high or greater.

As mentioned earlier, area fisheries leaders are working to improve upon the quality of Bristol Bay salmon. While BBEDC has been able acquire ice machines for 6 communities in the region, it's going to be expensive to produce ice in the region. Currently it costs about \$50 a ton to produce ice in Homer, as compared to estimated costs of \$200 a ton in Dillingham.

Many of the region's communities are located in coastal areas where they have the potential to harness wind power from frequent offshore winds. A small family-owned wind generator was once used in Dillingham, and is currently being used by one family in Naknek.



and two families in Pilot Point. Technological strides have been made to wind power generators, and its use a low-cost power source is beginning to flourish worldwide.

**G. Community Strategic Planning Project:**

**\$400,000**

In light of the region's devastated fishing economy, there's a need for numerous communities in the region to develop long-term strategic economic development plans.

The region has 30 communities and about 7 have long-term economic development plans that are either completed or soon to be completed. Community infrastructure plans are generally a prerequisite for the funding of community projects by the state and federal government agencies. Recently the Denali Commission refused to fund a number of health clinics in the region primarily because the communities that applied for such grant funds were turned down because they didn't have community plans that make reference to health clinics.

In its recent meeting on March 18-19, 2003, BBNA's 35-member board ranked the development of strategic community economic development plans as a very high priority.

In response to this, BBNA sees the need to hire 3 Community Development Planners or Economic Development Consultants to work with communities to complete individual strategic community plans. If this project is funded, BBNA will charge the community planners/consultants to meet with community leaders to begin preparing individual community plans. They will assist the communities identify and document both short-term and long-term needs as it relates to infrastructure development projects such as cultural facilities, transportation, waste disposal, housing, and energy development. The planners/consultants will help them prioritize their needs. They will also identify economic development potentials in the communities and work with the communities to prepare a development strategies for the economic potentials.

**For additional information about above projects, contact:**

1. Robin Samuelson, President and CEO, Bristol Bay Economic Development Corporation at (907) 842-1099 or email him at [sockeye1@nushtel.net](mailto:sockeye1@nushtel.net).
2. Jeff Currier, Manager, Lake and Peninsula Borough at (907) 246-3421 or email him at [lpboro@bristolbay.com](mailto:lpboro@bristolbay.com).
3. George Castaneda, Manager, Bristol Bay Borough at (907) 246-4224 or email him at [admin@theborough.com](mailto:admin@theborough.com).
4. John Fulton, City Manager, City of Dillingham at (907) 842-5211 or email him at [cofdlgnt@nushtel.com](mailto:cofdlgnt@nushtel.com).
5. Dr. Erie V. Johnson, Executive Director, Southwest Alaska Vocational/Technical Center at (907) 246-4600 or email him at [bnev@uaf.edu](mailto:bnev@uaf.edu).
6. Tom Hawkins, Chief of Operations, Bristol Bay Native Corporation at (907) 278-3602 or email him at [thawk@bbnc.net](mailto:thawk@bbnc.net).
7. Jim Brewer, Mayor, City of Chignik at (907) 749-2280.
8. Marie Paul, Mayor, City of Togiak at (907) 493-5820.
9. Richard Deigh, Mayor, City of Egegik at (907) 233-2231.

10. Boris R. Kosbruk, Native Village of Perryville at (907) 853-2211.

### **C. BBNA's EDA Tourism Development Grant:**

Thanks to the U. S. Department of Commerce, Economic Adjustment Office, in February 2000, BBNA was awarded a \$150,000 grant to implement a tourism development program in the region. During the first year of the grant, BBNA hired Lois Sorensen as Tourism Development Planner

The following is a list of communities and number of participants Mrs. Sorensen offered tourism development workshops in:

| <b>Date:</b>        | <b>Community:</b> | <b># of Participants:</b> |
|---------------------|-------------------|---------------------------|
| September. 15, 2000 | Aleknagik         | 2                         |
| December 13, 2000   | Nondalton         | 25                        |
| January 24, 2001    | Naknek            | 9                         |
| February 7, 2001    | Chignik Lake      | 11                        |
| February 21, 2001   | New Stuyahok      | 17                        |
| March 7, 2001       | Togiak            | 21                        |
| October 30, 2001    | Pedro Bay         | 4                         |
| October 31, 2001    | Kokhanok          | 31                        |
| <b>Total</b>        | <b>8</b>          | <b>120</b>                |

On Nov. 6, 2002, BBNA hired Kenny Wilson of Dillingham to work as BBNA Tourism Development Planner. He has offered tourism development workshops in the following communities:

| <b>Date:</b>      | <b>Community:</b> | <b># of Participants:</b> |
|-------------------|-------------------|---------------------------|
| December 12, 2002 | Manokotak         | 7                         |
| January 7, 2003   | Clark's Point     | 5                         |
| February 25, 2003 | Aleknagik         | 15                        |
| March 11, 2003    | Levelock          | 8                         |
| April 2, 2003     | New Stuyahok      | 14                        |
| April 7, 2003     | Koliganek         | 16                        |
| <b>Total:</b>     | <b>6</b>          | <b>65</b>                 |

It should be noted that Mr. Wilson was assigned to offer tourism development workshops in the smaller communities of the region because the workshops have already been held in the larger villages. In these workshops, Mr. Wilson provided information on how area villagers could start-up bed and breakfasts; obtain their U. S. Coast Guard 6-pak licenses, and how they can set up village tours. Throughout the winter (and as of March 28, 2003) Mr. Wilson responded to 163 individuals in the region who had inquiries about ecotourism, bed & breakfasts, obtaining U. S. Coast Guard 6-pak licenses, and booking clients.

BBNA's Planner expects to request an extension to BBNA's Economic Adjustment

grant to enable Mr. Wilson to return to work next fall (after he takes leave-without-pay for 3 months).

#### **D. Bristol Bay Economic Summit**

In 2002, BBNA's Planner submitted a \$20,000 grant application to the State Department of Labor and Workforce Development to organize the Bristol Bay Economic Summit to be held April 23-25, 2003. With the grant funds received, BBNA plans to offer a "first ever" live web cast of the summit proceeding to enable area villagers to participate with issues addressed at the summit from their schools, village council buildings, or homes. During the summit, BBNA plans to address such issues as economic recovery, fishery restructuring, transportation, energy, mineral and tourism development, and small business management development and assistance.

#### **IV. The Region and Its Economy**

##### **A. General Description of the Area:**

The 2000 U. S. Census has tabulated 7,799 residents living in the region, up from the 1990 census count of 6,972 (or the region has seen a 12% increase in the total population). For census purposes, there are three (3) separate census areas. The Bristol Bay Borough Census Area includes the communities of King Salmon, Naknek, and South Naknek. The Dillingham Census Area includes 9 communities located in the Nushagak and Togiak areas, and the Lake and Peninsula Borough Census Area includes 17 communities located on the Alaska Peninsula and Lake Iliamna areas.

The region has three (3) major mountain and seven (7) major river systems that define the placement of settlements. Most of the region's landmass is moist tundra, with stunted cottonwood and spruce trees scattered throughout the region. The seven (7) major rivers are the Wood River, Nushagak River, Kvichak River, Naknek River, Egegik River, Ugashik River, and Meshik River.

The climate is maritime, and usually cool, humid, and windy. Cloud cover is present an average of 75.8% year-round. Average summer temperatures range from 37 to 66 F. Average winter temperatures range from 4 to 34 F. The highest recorded temperature was 88 F., and the lowest -53 F. Annual rainfall averages 19.62 inches; and snowfall an average of 44.7 inches. Winter winds, prevailing from the north, average 9.4 to 10.9 mph; and summer winds, prevailing from the south, average 9.7 to 10.6 mph. Winds occasionally reach speeds of 80 mph, but overall average wind speed is 10.2 mph. Average winter wind chill factors range from -15 to 20 F., but -25 to -75 F. are not uncommon.

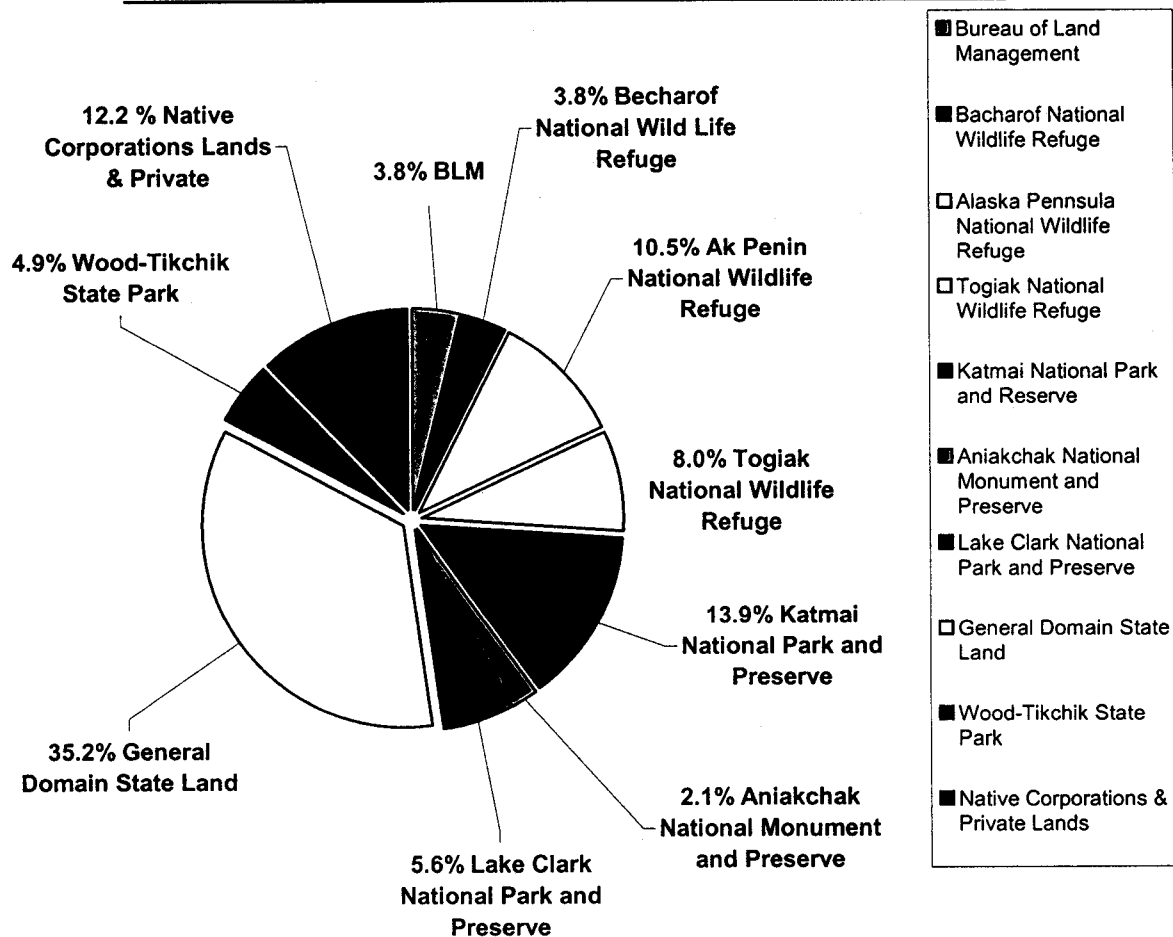
Except for roads between Dillingham and Aleknagik; King Salmon and Naknek; and a bridge and road upgrade between Nondalton, Iliamna, and Newhalen, there are no other roads connecting the communities. The region has daily, year-round air transportation provided to and from Anchorage by 5 commercial airlines and 3 cargo airlines. Peninsula Airways, Alaska Airlines, and Frontier Aviation provide passenger service between Dillingham and King Salmon during the summer months. Era Aviation and Birchwood Air flies between Anchorage and the Iliamna communities. Northern Air Cargo, Lynden Air, and Air Cargo Express provide air cargo services to Dillingham. Many small bush airlines fly scheduled and charter flights out of Dillingham, King Salmon, and Iliamna. Most freight is hauled via by-pass mail from Anchorage and by barge from Seattle and Anchorage. Local individuals travel by personal vehicles, snow machines, 4-wheelers, skiffs, and bush airplanes.

There is one intra-regional road connecting the Iliamna area to Cook Inlet known as the Portage Road. This road exists between Williamsport on the Cook Inlet side and Pile Bay in Lake Iliamna. The road is used to haul Bristol Bay commercial fishing boats between

Cook Inlet area and Bristol Bay. Its currently a one-lane road and has a small bridge, however is slated to be upgraded. It's located between the boundaries of the Lake and Peninsula Borough and the Kenai Peninsula Borough, and both boroughs support its proposed upgrade.

Telephone communications via satellite is available to the entire region through four telephone cooperatives. VHF, CB radios, and single side band radios are used in most communities. All communities receive the Alaska Rural Communication (ARC) television station - a state subsidized television network. Two Dillingham radio stations and a Naknek station provide broadcasts throughout the region. Mail is flown to Dillingham and King Salmon and transferred to the outlying communities.

## LAND OWNERSHIP IN THE BRISTOL BAY REGION \*



|   |        |
|---|--------|
| Bureau of Land Management                 | 3.80%  |
| Bacharof National Wildlife Refuge         | 3.80%  |
| Alaska Peninsula National Wildlife Refuge | 10.50% |
| Togiak National Wildlife Refuge           | 8.00%  |
| Katmai National Park and Reserve          | 13.90% |
| Aniakchak National Monument and Preserve  | 2.10%  |
| Lake Clark National Park and Preserve     | 5.60%  |
| General Domain State Land                 | 35.20% |
| Wood-Tikchik State Park                   | 4.90%  |
| Native Corporations & Private Lands       | 12.20% |

\*The above chart was produced by Kenny Wilson, BBNA's Tourism Development Planner, with information obtained from a chart produced by the Bristol Bay Coastal Resource Service Area.

### C. High Cost of Living:

The cost of living in the region is one of the highest in the state and nation. The following table shows the cost of living in Dillingham compared to Anchorage, Alaska and Portland, Oregon. The University of Alaska, Fairbanks, Cooperative Extension Service surveyed 20 communities in the state and compiled the data in the table. It shows the cost of items for the month of September 2002. The cost of food is calculated per week for a family of four with two children between the ages 6 to 11 years old.

| Category                           | Dillingham, AK | Anchorage, AK | Portland, Oregon |
|------------------------------------|----------------|---------------|------------------|
| Food (per week)                    | \$189.52       | \$100.61      | \$86.99          |
| Electricity<br>1,000 kWh           | \$197.13*      | \$110.55      | \$83.20          |
| Heating Oil<br>55 gallons          | \$115.78       | \$72.05       | \$115.50         |
| Gasoline<br>55 gallons<br>unleaded | \$138.28       | \$83.60       | \$74.75          |
| Lumber<br>(2x4x8)                  | \$5.12         | \$3.38        | \$2.00           |
| Propane Gas<br>100# refill         | \$107.00       | \$46.01       | \$37.76          |

\* = Dillingham is eligible for Alaska State's Power Cost Equalization Program. It should also be noted that Dillingham's prices for goods are generally the lowest in the region.

While the above table shows the cost for necessities in Dillingham, the cost of groceries is generally higher in the smaller communities because grocery items must be "shuttled" through Dillingham, Iliamna, or King Salmon.

### D. High Cost of Energy:

Because of their remoteness, most of the region's residents living in smaller communities generally pay about twice as much for electricity than Dillingham consumers and 4 times as much as Anchorage consumers. In some cases, such as in the community of Egegik, residents pay as much as \$.55 per kWh.

The Alaska Power Authority indicates that the goal of the Alaska's Power Cost

Equalization (PCE) program is to provide economic assistance to customers in rural areas of Alaska where, in many instances, the kilowatt-hour charge for electricity can be three to five times higher than the most urban areas of the state. The program seeks to equalize the power cost per kilowatt-hour statewide. However, even with PCE rural electric costs are 2-3 times higher than urban energy costs.<sup>2</sup>

Although Alaska's legislature approved a long-term funding plan for Alaska's PCE program, rising fuel cost will drive rates up because most Bristol Bay communities are solely dependent upon diesel generators for electricity.

The cost of gasoline in the region is also very expensive. Back in 2000, area residents in the following communities paid the following amounts for gasoline:

| <b>Bristol Bay Community:</b> | <b>Cost per Gallon of Gasoline:</b> |
|-------------------------------|-------------------------------------|
| Dillingham                    | \$2.60                              |
| Portage Creek                 | \$3.15                              |
| New Stuyahok                  | \$2.75                              |
| Koliganek                     | \$2.75                              |
| Newhalen                      | \$2.98 <sup>3</sup>                 |
| Nondalton                     | \$4.00 <sup>2</sup>                 |
| Iliamna                       | \$2.98 <sup>2</sup>                 |
| Kokhanok                      | \$3.24 <sup>2</sup>                 |
| Iguigig                       | \$2.98 <sup>2</sup>                 |
| Pilot Point/Ugashik           | \$2.39 <sup>2</sup>                 |

Because the cost of gasoline is so high, a number of communities in the region are beginning to experience depleted fuel supplies during the spring months. In the past, the State Division of Energy provided \$100,000 bulk-fuel loans to area communities, however because of state budget cuts, this program has been cut to \$50,000 per community. With gasoline being very expensive, some of the area communities cannot buy enough fuel to last all winter.

Local Dillingham fuel suppliers have indicated that in the spring of 2003, after the first fuel barge arrives, the price for both gasoline and home-heating fuel is expected to go up by \$.50 per gallon.

To help offset the high cost of living in the region, most area residents depend upon subsistence hunting and fishing.

<sup>2</sup> Statement of Alaska's Power Cost Equalization program on the Alaska Energy Authority's Internet site at <http://www.aidea.org/pce.htm>.

<sup>3</sup> Trip Report on Economic Indicators for Lake and Peninsula Borough completed in Sept. 2000 by Marvin Smith, Community Development Coordinator, Lake and Peninsula Borough, King Salmon.



### **E. Dependency on Subsistence Hunting and Fishing:**

In many of the smaller villages, outside of seasonal commercial fishing and trapping activities, there are few employment alternatives. With the salmon and herring fishing season lasting three months (May through July), the seasonal fluctuations of the salmon and herring runs play a major part in the economic conditions of these communities. Other economic activities include cottage Native arts & crafts, and trapping for beaver, land otter, mink, lynx, fox, and marten. The crafts market remains good, but the market for furs has collapsed, and no longer contributes substantially to the local economy.

With very limited economic opportunities, subsistence hunting and fishing plays a very significant role to area villagers. During the salmon season, subsistence set-netters catch and process salmon for their own personal use. Freshwater fish, porcupine, and rabbit are taken year-round. Moose, caribou, ptarmigan, ducks, and geese are hunted in season. Also harvested in the summer, are salmon berries, blueberries, blackberries, huckleberries, and low and high bush cranberries.

### **F. Natural Resources:**

The region is considered one of the richest areas in the State for its' abundance of natural resources. It has the world's largest runs of sockeye salmon, and all five major species of salmon - the chinook, sockeye, chum, coho, and pink salmon. It also has one of the state's largest herring fisheries, and a small halibut fishery. The offshore area is considered the nursing grounds for North Pacific halibut stocks, king crab, and numerous other species. Other bottom fish species such as yellowfin sole, gray cod, shrimp, and clams are abundant in the area.

The region is abundant with edible mammals, such as caribou, moose, brown and black bears. During the summer months, migratory birds - ducks, geese, cranes, and swans frequent the area to spend the summer months. The region has numerous types of marine mammals, such as harbor seals, seal lions, walrus, belugas, and whales. In the many lakes and river systems, freshwater fish, such as rainbow trout, grayling, lake trout, Dolly Varden, pike, smelt, can be found.

### **G. The Region's Commercial Fisheries:**

Despite the downward trend of sockeye returns and prices, the area's commercial salmon fishery continues to be the principal economic base to the region. According to ADF&G, the ex-vessel value of the sockeye fishery in 2001 totaled \$37.7 million, which is the lowest ex-vessel value in 20 years (1981 to 2001). It was 70% below the 20-year average ex-vessel value of \$127 million.<sup>3</sup> (See related charts of the fishery's harvests, earnings,

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<sup>3</sup> 2001 Bristol Bay Salmon Fishery Season Summary, Alaska Department of Fish & Game at

tables on ex-vessel values, and drift permit values following this section)

According to Alaska's Commercial Fisheries Entry Commission, there are currently 1,885 commercial drift (boat) salmon permits and 1,017 setnet (beach) salmon permits. In the early 1990's, Bristol Bay drift permits were selling for as high as \$248,000. In recent years, these permits have crashed in value, and currently are selling for about \$30,000. Setnet permits prices continue to remain stable and are worth \$20,000, and could go high as \$60,000 based on site location and production history. This stability reflects the much lower overhead costs it takes to operate a setnet site.

The Togiak commercial herring fishery, developed in the late 1970's, has consistently been the largest in the State. In the past, it has provided an additional ex-vessel value of about \$10 million per year to the region's economy. Its commercial roe-on-kelp fishery generally contributed an additional ex-vessel value of about \$200,000 per year. However, in recent years, the ex-vessel value of the fishery has dropped because of weak herring roe prices in Japan. Furthermore, the roe-on-kelp fishery has been shut down for 4 out of the 5 last years. There was not enough spawn-on-kelp in the area to warrant an opening (in 1999, there was a harvest, however it was closed in 2002, 2000, 1998 and 1997).

The region also has a very small commercial halibut fishery developed in 1990. In 1999 the fishery received an increase in its harvest quota - up from 90,000 lbs. to 207,000 lbs. The Bristol Bay Economic Development Corporation, under provisions of the Western Alaska Community Development Quota (CDQ) Program, manages the fishery.

### **1. 2003 Togiak Herring Fishery Outlook:**

ADF&G biologists are forecasting a 2003 Togiak herring harvest of 22,081 short tons with the highest percentage of composition being 6 and 7 year old age class herring. The purse seiners would be allocated 15,457 tons, and gillnet fleet 6,624 tons. Herring prices in Japan remain weak; a reflection of that nation's depressed economy. According to Japanese market seafood watcher Bill Atkinson, wholesale prices are at least stable. Last year most Togiak herring buyers paid \$100 to \$125 per ton to purse seiners, and \$125 to \$150 per ton to gillnetters.

Weak herring prices have resulted in a drop in fishing effort in Togiak. ADF&G, figures show the participation in 2002 was one of the lowest on record, with only 37 seiners and 82 gillnetters fishing. Prices are expected to remain weak because of Japan's troubled economy. Last year herring buyers paid from \$150 to \$200 per ton.

In 2001 most Togiak herring processors entered into cooperative agreements with their purse seine fleets. They agreed to shy away from harvesting huge schools to improve on quality by enabling the processors to freeze the herring as soon as possible. Because

Togiak herring are XL in size, their carcass has a food value in Japan.

## 2. 2003 Bristol Bay Salmon Fishery Outlook:

Things are looking better for expected sockeye returns. ADF&G is forecasting a total run of 24.1 million sockeye for 2003 and a harvest of 16.8 million (10.4 million was harvested in 2002). Despite that, the forecast remains 36 percent lower than the previous 10-year average return of 37-million sockeye. The University of Washington's Fisheries Research Institute (FRI) is a more optimistic, forecasting a return of 30.7 million sockeye and a harvest of 18.1 million.

Per the Nov. 2002 issue of the Salmon Market Bulletin, canned sockeye salmon prices have improved. SMB states that decreased production and strong sales reduced September canned sockeye inventory by 43% from the past 3-year average. Prices have gone up \$5 per case for both 48 tall and half-pound cans. The average price for a case of half-pound canned sockeye was \$58.67; up by 11% from the previous period, and half-pound cans make up over 60% of canned sockeye sales.

Large factors in the improved market conditions have been both reductions in carryover and production of canned sockeye since 1999 as the following table shows:

| <u>Year</u> | <u>Carryover</u> | <u>Production</u> | <u>Wholesale Volume<br/>(Sept-August Sales<br/>Season)</u> | <u>1 - Sept.<br/>Inventory</u> |
|-------------|------------------|-------------------|--|--------------------------------|
| 1999        |                  | 1,211,000         | (911,000)  | 1,211,000                      |
| 2000        | 300,000          | 1,237,000         | (1,116,000)  | 1,537,000                      |
| 2001        | 421,000          | 871,000           | (1,220,000)  | 1,292,000                      |
| 2002        | 72,000           | 700,000           |  | 772,000                        |

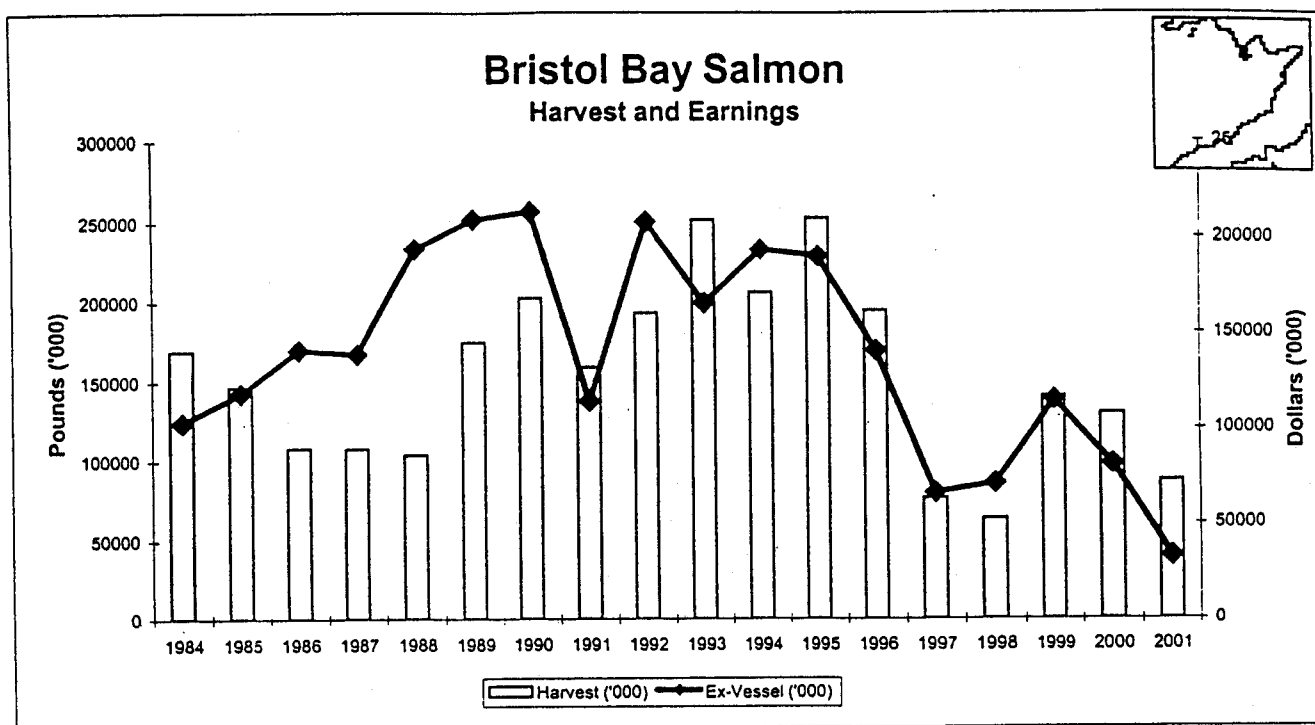
Source: Salmon Market Bulletin, November 2002, Page 3

While the above table spells good news for the canned sockeye market, the latest word is that the Chilean coho farmed salmon industry plans to up increase its production in 2003. Per an article in Seafood.Com (Nov. 12, 2002), the farmed salmon industry sustained heavy losses in 2002, and will more than likely increase its production in 2003 to try and offset its losses.

Chris McDowell of the Alaska Salmon Market Service believes the U.S. market for salmon is far bigger than most people realize. He believes that within two or three years, the U. S. will surpass Japan in salmon imports. U.S. salmon imports are growing at twice the rate of Japanese imports and the growth is less price-sensitive than Japan. He estimates the U. S. consumes about 800,000 pounds of salmon fillets each day, and if every sockeye caught in the Bay in 2002 were made into fillets, U.S. consumers could eat it all in about five weeks.

If U. S. Congress approves a bill, domestic retailers will be required by October 4, 2004 to label salmon indicating its country of origin and whether the salmon is wild or farmed. This labeling requirement is expected to provide wild salmon a marketing advantage over farmed salmon. Word is getting out that farmed salmon sites are known to cause environmental harm, and people are deciding against eating farmed salmon similar to folks who have decided against eating tuna because of the fisheries associated by-catch problems with porpoises and whales. Wild salmon contains no artificial growth hormones, coloring or antibiotics, and is recognized as a health food because it's natural omega 3 fatty acids helps to lower cholesterol, preventing strokes and heart attacks.

# Harvest and Ex-Vessel Value Earnings for Bristol Bay, 1984 - 2001



Numbers represent total harvest pounds in region of all salmon species and total ex-vessel price paid.

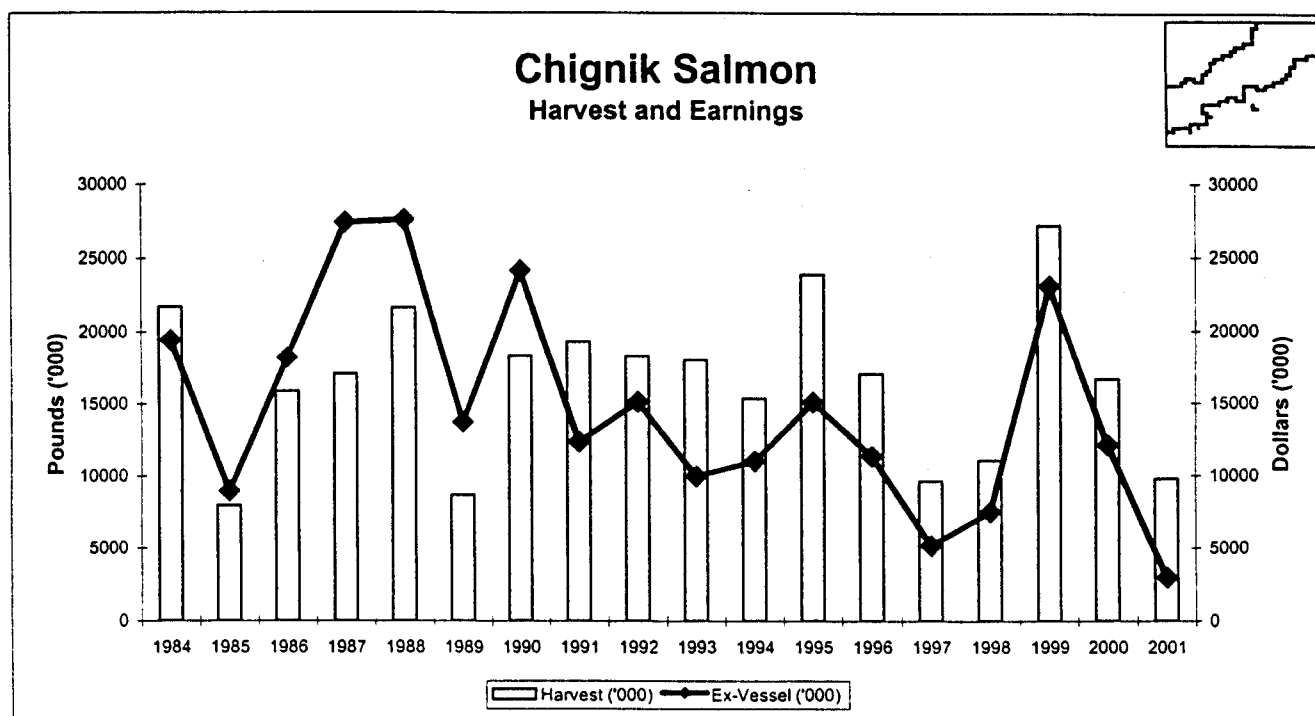
## Bristol Bay

|      | Harvest ('000) | Ex-Vessel ('000) |
|------|----------------|------------------|
| 1984 | 169209         | \$ 103,513       |
| 1985 | 146630         | \$ 118,978       |
| 1986 | 108177         | \$ 141,563       |
| 1987 | 107637         | \$ 139,267       |
| 1988 | 103683         | \$ 194,191       |
| 1989 | 174311         | \$ 209,573       |
| 1990 | 202103         | \$ 213,439       |
| 1991 | 158767         | \$ 114,680       |
| 1992 | 192677         | \$ 208,246       |
| 1993 | 250912         | \$ 165,679       |
| 1994 | 205390         | \$ 193,550       |
| 1995 | 252040         | \$ 190,200       |
| 1996 | 194300         | \$ 140,870       |
| 1997 | 76350          | \$ 66,480        |
| 1998 | 63580          | \$ 71,230        |
| 1999 | 140270         | \$ 115,080       |
| 2000 | 129600         | \$ 81,080        |
| 2001 | 86744          | \$ 33,382        |

2001 numbers preliminary

Source: Glenn Haight, State Department of Commerce & Economic Development

# Harvest and Ex-Vessel Value Earnings for Chignik, 1984 - 2001



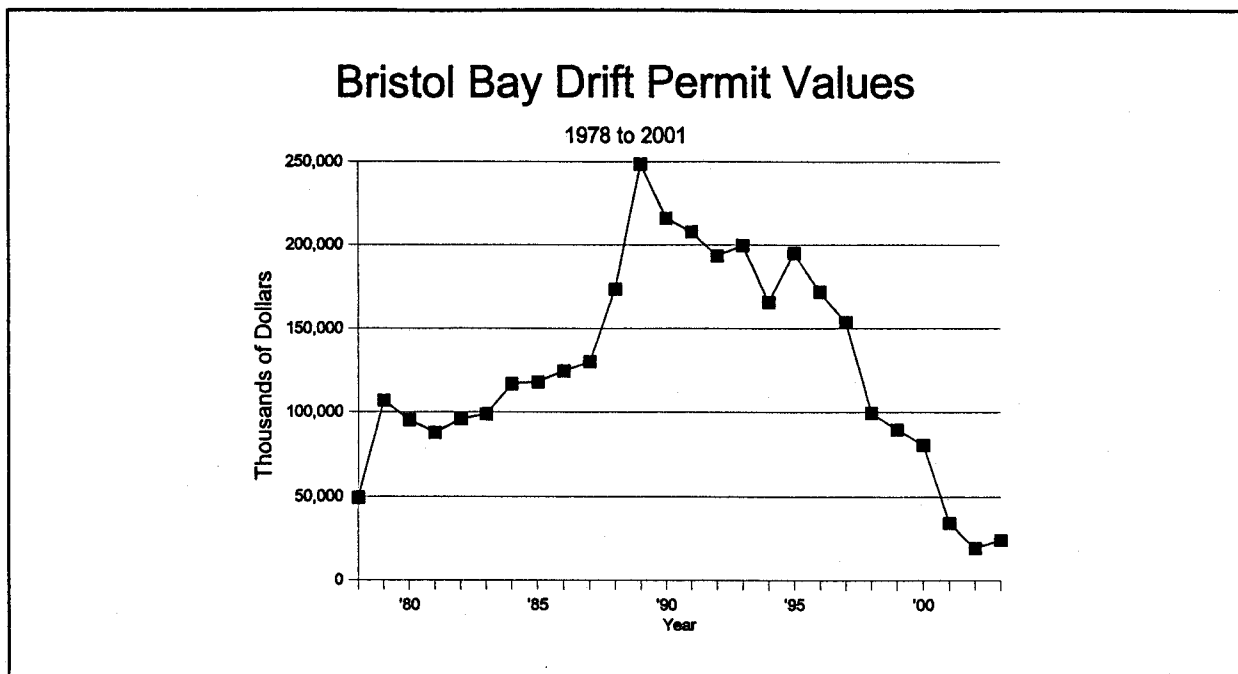
Numbers represent total harvest pounds in region of all salmon species and total ex-vessel price paid.

## Chignik

|      | Harvest ('000) | Ex-Vessel ('000) |
|------|----------------|------------------|
| 1984 | 21723          | \$ 19,439        |
| 1985 | 7993           | \$ 9,000         |
| 1986 | 15868          | \$ 18,212        |
| 1987 | 17085          | \$ 27,402        |
| 1988 | 21648          | \$ 27,543        |
| 1989 | 8711           | \$ 13,720        |
| 1990 | 18310          | \$ 24,119        |
| 1991 | 19257          | \$ 12,344        |
| 1992 | 18265          | \$ 15,090        |
| 1993 | 18008          | \$ 9,966         |
| 1994 | 15330          | \$ 10,990        |
| 1995 | 23850          | \$ 15,070        |
| 1996 | 17039          | \$ 11,365        |
| 1997 | 9650           | \$ 5,200         |
| 1998 | 11070          | \$ 7,520         |
| 1999 | 27150          | \$ 23,060        |
| 2000 | 16640          | \$ 12,110        |
| 2001 | 9798           | \$ 2,982         |

2001 numbers preliminary

Source: Glenn Haight, State Department of Commerce & Economic Development



Source: Alaska Commercial Fisheries Entry Commission

Note: 1978 to 1981 are highest estimates for year, and remaining years are averages for each year, with exception of '03 which is the estimated value for Feb. 2003. It should be noted that permits have recently sold for about \$30,000.

## H. 2000 U. S. Population Census:

According to the U. S. Census Bureau, the 2000 population for the region was 7,799 residents living in 30 communities. The population count for each community in each sub-region from 1970 through 2000 was:

| <u>Nushagak Bay</u>     | 1970  | 1980  | 1990  | 2000  |
|-------------------------|-------|-------|-------|-------|
| Aleknagik               | 128   | 154   | 185   | 221   |
| Clark's Point           | 95    | 79    | 60    | 75    |
| Dillingham              | 914   | 1,563 | 2,017 | 2,466 |
| Eruk                    | 51    | 7     | 3     | N/A   |
| <u>Nushagak River</u>   |       |       |       |       |
| Ekwok                   | 103   | 77    | 77    | 130   |
| Koliganek               | 142   | 117   | 181   | 182   |
| Levelock                | 74    | 79    | 105   | 73    |
| New Stuyahok            | 216   | 331   | 391   | 471   |
| Portage Creek           | 60    | 48    | 5     | 36    |
| <u>Togiak Bay</u>       |       |       |       |       |
| Manokotak               | 214   | 294   | 385   | 399   |
| Togiak                  | 383   | 470   | 613   | 809   |
| Twin Hills              | 67    | 70    | 66    | 69    |
| <u>Kvichak Bay</u>      |       |       |       |       |
| Egegik                  | 148   | 75    | 122   | 116   |
| King Salmon             | 202   | 170   | 696   | 442   |
| Naknek                  | 178   | 318   | 575   | 678   |
| Pilot Point             | 68    | 66    | 53    | 100   |
| Port Heiden             | 66    | 92    | 119   | 119   |
| South Naknek            | 154   | 145   | 136   | 137   |
| Ugashik                 | NA    | 13    | 7     | 11    |
| <u>Iliamna Lake</u>     |       |       |       |       |
| Igiugig                 | 35    | 33    | 33    | 53    |
| Iliamna                 | 58    | 94    | 94    | 102   |
| Kokhanok                | 88    | 83    | 152   | 174   |
| Newhalen                | 88    | 87    | 160   | 122   |
| Nondalton               | 184   | 173   | 178   | 221   |
| Pedro Bay               | 65    | 33    | 42    | 50    |
| <u>Alaska Peninsula</u> |       |       |       |       |
| Chignik                 | 83    | 178   | 188   | 79    |
| Chignik Lake            | 117   | 138   | 133   | 145   |
| Chignik Lagoon          | 45    | 48    | 53    | 103   |
| Ivanof Bay              | 48    | 40    | 35    | 22    |
| Perryville              | 94    | 111   | 108   | 107   |
| TOTALS                  | 4,168 | 5,186 | 6,972 | 7,799 |

Source: Alaska Department of Labor, Research & Analysis, Demographics Unit, 1988, Population Estimates; and 1990 and 2000 U. S. Census.

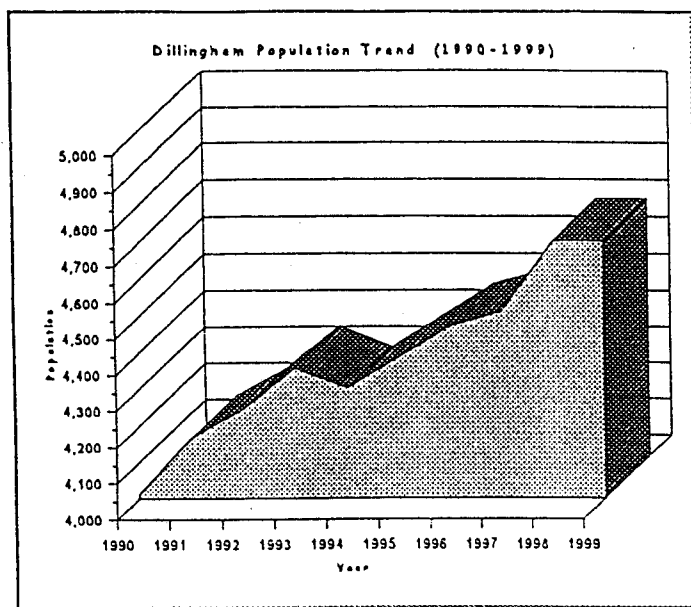


## 2. 1. Native Population:

The breakdown for the region's Native population is has such:

| Sub-region:<br>Village     | Total Population | Native Population | Over 18 population |
|----------------------------|------------------|-------------------|--------------------|
| <b>1. Nushagak Bay</b>     | <b>2,762</b>     | <b>1,545</b>      | <b>1,797</b>       |
| Aleknagik                  | 221              | 181               | 139                |
| Clark's Point              | 75               | 68                | 46                 |
| Dillingham                 | 2,466            | 1,296             | 1,612              |
| Ekuk                       | N/A              | N/A               | N/A                |
| <b>2. Nushagak River</b>   | <b>819</b>       | <b>746</b>        | <b>474</b>         |
| Ekwok                      | 130              | 119               | 73                 |
| Koliganek                  | 182              | 159               | 105                |
| New Stuyahok               | 471              | 437               | 279                |
| Portage Creek              | 36               | 31                | 17                 |
| <b>3. Togiak Bay</b>       | <b>1,277</b>     | <b>1,134</b>      | <b>729</b>         |
| Manokotak                  | 399              | 378               | 222                |
| Togiak                     | 809              | 698               | 463                |
| Twin Hills                 | 69               | 58                | 44                 |
| <b>4. Kvichak Bay</b>      | <b>1,603</b>     | <b>789</b>        | <b>1,081</b>       |
| Egegik                     | 116              | 67                | 78                 |
| King Salmon                | 442              | 128               | 326                |
| Naknek                     | 678              | 307               | 441                |
| Pilot Point                | 100              | 86                | 57                 |
| Port Heiden                | 119              | 78                | 72                 |
| South Naknek               | 137              | 115               | 96                 |
| Ugashik                    | 11               | 8                 | 11                 |
| <b>5. Iliamna Lake</b>     | <b>882</b>       | <b>702</b>        | <b>534</b>         |
| Iguigig                    | 53               | 38                | 30                 |
| Iliamna                    | 102              | 51                | 67                 |
| Kokhanok                   | 174              | 151               | 113                |
| Levelock                   | 122              | 109               | 73                 |
| Newhalen                   | 160              | 136               | 88                 |
| Nondalton                  | 221              | 197               | 133                |
| Pedro Bay                  | 50               | 20                | 30                 |
| <b>6. Alaska Peninsula</b> | <b>456</b>       | <b>383</b>        | <b>293</b>         |
| Chignik                    | 79               | 48                | 59                 |
| Chignik Lagoon             | 103              | 84                | 71                 |
| Chignik Lake               | 145              | 126               | 80                 |
| Ivanof Bay                 | 22               | 21                | 18                 |
| Perryville                 | 107              | 104               | 65                 |
| <b>Totals:</b>             | <b>7,799</b>     | <b>5,299</b>      | <b>4,908</b>       |

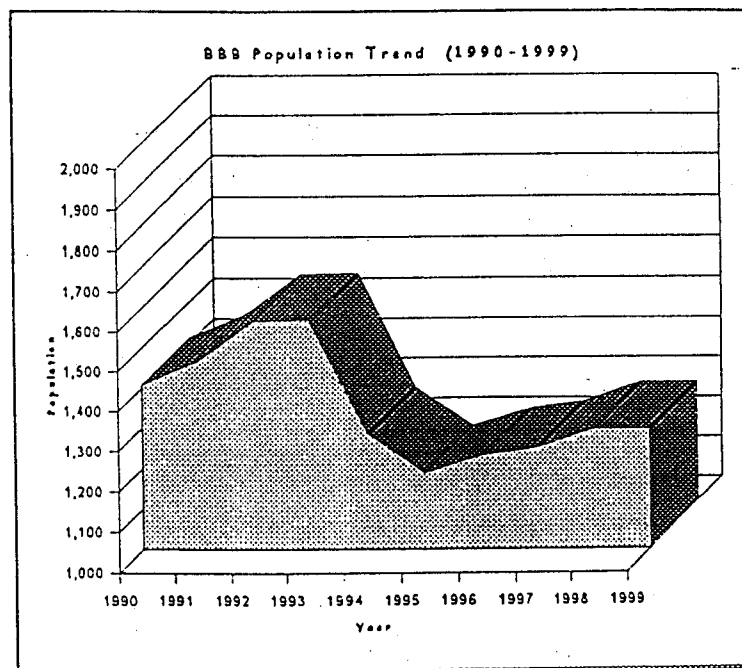
Source: 2000 U. S. Census Bureau



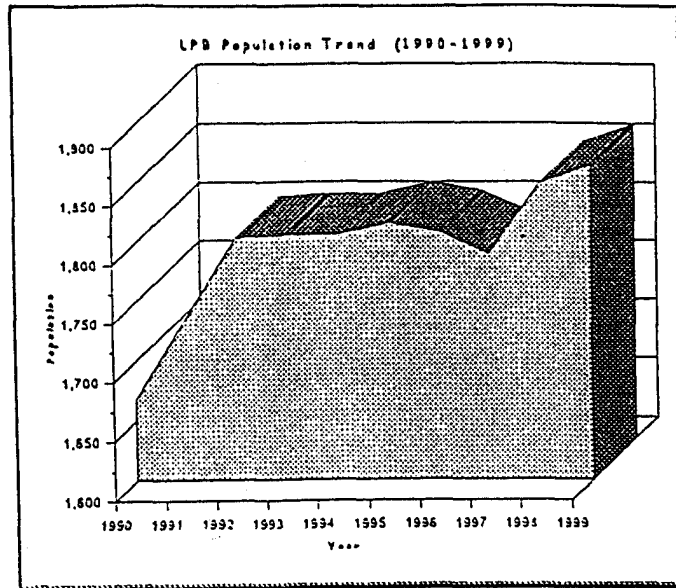
The Dillingham Census Area shows a rapid increase in population over the past decade. Only in the last year has population remained steady. The city of Dillingham encompasses 33 square miles and is a first class city.

Over half of Dillingham's population is native (55.8%). While the fishing industry is important in this area, there has been growth and interest in developing tourism opportunities in Bristol Bay.

The Bristol Bay Borough (BBB) population trend represents a slight increase over the past five years after a sharp decline in 1993-94. During the red salmon season, population tends to increase. BBB comprises 519 square land miles and 398 square miles of water; it is considered a second class Borough. BBB's native population is 32.3 percent of its total population. Commercial fishing, processing, government and transportation services are the mainstays of this economy.



The above charts have been taken from the 1999 Southwest Alaska Comprehensive Economic Development Strategy Report completed by the Southwest Alaska Municipal Conference, Anchorage.



Lake and Peninsula Borough population numbers have sharply increased in the last two to three years after remaining steady over the last decade. During the peak commercial fishing season, the Borough population increases. The Lake and Peninsula Borough is a home rule Borough consisting of 23,632 square land miles and 5,376 square water miles. It's native population is 75.6 percent of its total population. The main components of this economy are commercial fishing, tourism and sport fishing.

The above chart was taken from the 1999 Southwest Alaska Comprehensive Economic Development Strategy Report completed by the Southwest Alaska Municipal Conference, Anchorage.

### **3. Population Decline in Last Three Years:**

It should be noted that over the last two years, both the lower Alaska Peninsula area and the Bristol Bay Borough area communities in the region have seen a substantial loss of population. Back in 1990, Chignik had a population of 190 people, however today about 48 people there. Both Pilot Point and South Naknek are on the verge of having their schools shut down because they lack the necessary ten students to keep their schools open. Both communities were once large enough where this concern never existed before. The Bristol Bay Borough School District has lost 70 students over the last two years because of residents leaving the communities of Naknek and South Naknek.

In 2003, the Dillingham City Schools announced it will be losing 70 students and such a loss has caused a budget deficit. Four families have moved out from South Naknek and the community will have to close its school down next fall.

**U. S. Census Bureau 2000 Demographic Data on Bristol Bay Region:**

|                                     | <b>Dillingham:</b> | <b>Lake &amp; Peninsula<br/>Borough:</b> | <b>Bristol Bay<br/>Borough:</b> | <b>Alaska:</b> | <b>U. S.:</b> |
|-------------------------------------|--------------------|--|---------------------------------|----------------|---------------|
| <b>Per Capita Income:</b>           | \$16,021           | \$15,361                                 | \$22,210                        | \$22,660       | \$21,586      |
| <b>Medium Household<br/>Income:</b> | \$43,079           | \$36,422                                 | \$52,167                        | \$51,571       | \$41,994      |
| <b>Unemployment rate:</b>           | 11.5               | 14.3                                     | 10.5                            | 6.1            | 5.3**         |
| <b>Percent in Poverty:</b>          | 21.4               | 18.9                                     | 9.5                             | 9.4*           | 12.4*         |
| <b>Transfer Payments:</b>           | \$4,500*           | \$4,700*                                 | \$4,670*                        | N/A            | N/A           |

The Bristol Bay Borough Census Area includes the communities of Naknek, South Naknek, and King Salmon.

The Dillingham Census Area includes the communities of Dillingham, Togiak, Twin Hills, Manokotak, Clark's Point, Aleknagik, Portage Creek, Ekwok, New Stuyahok, and Koliganek.

The Lake and Peninsula Borough Census Area includes the communities of Nondalton, Newhalen, Iliamna, Pedro Bay, Kokhanok, Iguigig, Levelock, Egegik, Pilot Point, Ugashik, Port Heiden, Chignik Lake, Chignik Lagoon, Chignik Bay, Perryville, and Ivanof Bay.

\* = 1999 figure

\*\* = Estimate

A Snapshot of the Southwest Region \*\*\*  
updated 7/8/2001

|   | Alaska    | Aleutian East<br>Borough | Aleutian East<br>Census Area | Lake and Pen<br>Borough | Bristol Bay<br>Borough | Dillingham<br>Census Area |
|---|-----------|--------------------------|------------------------------|-------------------------|------------------------|---------------------------|
| Geography (Square miles)                      | 570,373.6 | 6,984.8                  | 4,402.1                      | 23,632.3                | 519.2                  | 18,466.9                  |
| Population:                                   | 626,932   | 2,697                    | 5,465                        | 1,823                   | 1,258                  | 4,922                     |
| Rate of change (1990-2000)                    | 14.0      | 9.5                      | -42.3                        | 8.0                     | -10.8                  | 22.7                      |
| Median age (2000)                             | 32.4      | 37.0                     | 36.1                         | 29.2                    | 36.0                   | 28.9                      |
| Persons per household (2000)                  | 2.74      | 2.69                     | 2.52                         | 3.1                     | 2.57                   | 3.2                       |
| Age distribution (2000):                      |           |                          |                              |                         |                        |                           |
| Percent under 5 years old                     | 7.6       | 4.3                      | 4.7                          | 8.0                     | 7.1                    | 9.7                       |
| Percent school age population (5 to 17)       | 22.8      | 12.5                     | 12.4                         | 29.8                    | 24.2                   | 28.4                      |
| Percent adult workforce population (18 to 64) | 63.8      | 80.5                     | 80.5                         | 56.7                    | 64.8                   | 56.1                      |
| Percent seniors (65 years & over)             | 5.7       | 2.6                      | 2.3                          | 5.4                     | 3.8                    | 5.7                       |
| Percent female (2000)                         | 48.3      | 35.1                     | 35.7                         | 46.8                    | 45.5                   | 47.8                      |
| Demographics of the region (2000):            |           |                          |                              |                         |                        |                           |
| One race                                      | 94.6      | 97.1                     | 96.5                         | 93.0                    | 97.6                   | 93.3                      |
| Percent White                                 | 69.3      | 24.0                     | 40.0                         | 18.8                    | 52.5                   | 21.6                      |
| Percent Black or African American             | 3.5       | 1.7                      | 3.0                          | 0.1                     | 0.6                    | 0.4                       |
| Percent American Indian or Alaska Native      | 15.6      | 37.3                     | 21.0                         | 73.5                    | 43.7                   | 70.1                      |
| Percent Asian                                 | 4.0       | 26.5                     | 24.6                         | 0.2                     | 0.2                    | 0.6                       |
| Native Hawaiian and Other Pacific Islander    | 0.5       | 0.3                      | 0.6                          | 0.2                     | 0.5                    | 0                         |
| Some other race                               | 1.6       | 7.4                      | 7.3                          | 0.3                     | 0.1                    | 0.5                       |
| Two or more races                             | 5.4       | 2.9                      | 3.5                          | 7.0                     | 2.4                    | 6.7                       |
| Percent Hispanic                              | 4.1       | 12.6                     | 10.5                         | 1.2                     | 0.6                    | 2.3                       |
| Workforce issues:                             |           |                          |                              |                         |                        |                           |
| Annual avg. unemployment rate (2000)          | 6.6       | 4.6                      | 8.6                          | 10.1                    | 11.5                   | 8.3                       |
| June 2001 unemployment rates                  | 5.5       | 4.6                      | 13.6                         | 10.8                    | 7.9                    | 9.1                       |
| May 2001 unemployment rates                   | 5.6       | 4.2                      | 10.8                         | 10.2                    | 7.2                    | 9.2                       |
| Percent nonresident workforce (1998)          | 19.5      | 70.0                     | 62.6                         | 30.2                    | 67.4                   | 30.2                      |
| Percent nonresident workforce (1999)          | 18.1      | 72.6                     | 58.0                         | 44.4                    | 66.3                   | 26.7                      |
| Annual average monthly employment (2000)p     | 280,551   | 1,576                    | 3,294                        | 721                     | 1,131                  | 2,399                     |
| Income measured:                              |           |                          |                              |                         |                        |                           |
| Personal per capita income (1999)             | \$ 28,629 | \$ 27,792                | \$ 32,478                    | \$ 19,533               | \$ 43,996              | \$ 25,935                 |
| Annual average wage and salary income (2000)p | \$ 34,705 | \$ 27,758                | \$ 32,959                    | \$ 25,465               | \$ 31,213              | \$ 28,916                 |
| Educational attainment:                       |           |                          |                              |                         |                        |                           |
| Percent high school graduate or higher (1990) | 86.6      | 66.4                     | 85.8                         | 60.7                    | 89.8                   | 82.5                      |
| Percent bachelor's degree or higher (1990)    | 23.0      | 12.9                     | 14.8                         | 14.4                    | 18.9                   | 21.3                      |

If there are any questions, please, e-mail: Brigitta Windisch-Cole@labor.state.ak.us

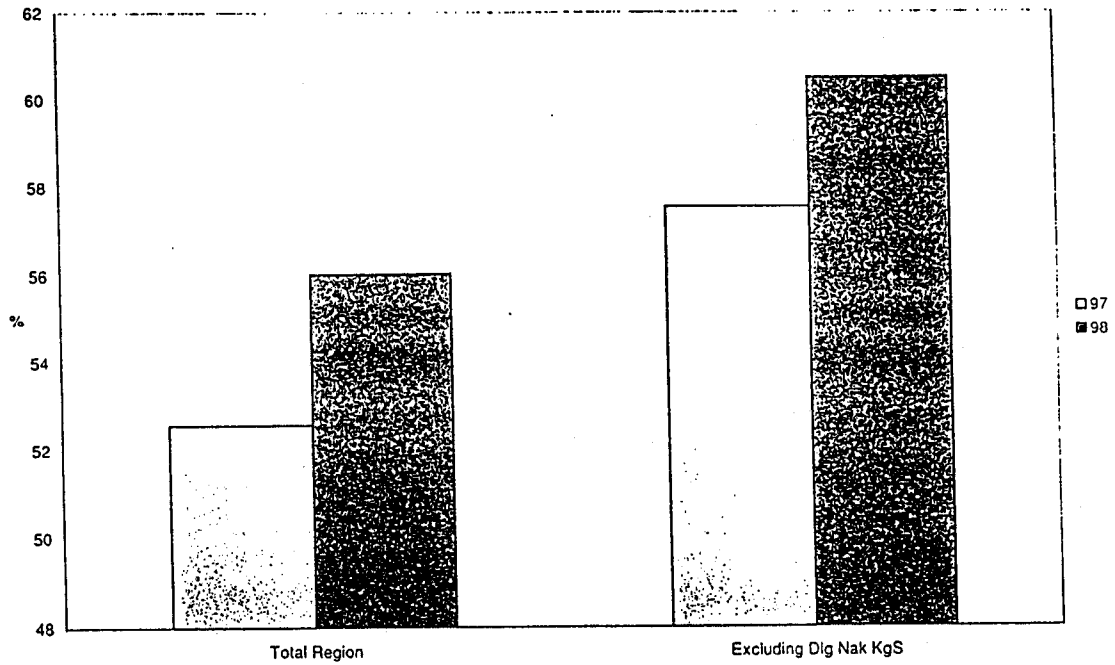
\*\*The Lake and Peninsula Borough was formed in 1989; used to be part of the Dillingham Census Area

Source: Alaska Department of Labor and Workforce Development, U.S. Census, Bureau of Economic Analysis.

\*\*\*Disclaimer: BBNA disclaims both federal and state income and employment statistics compiled and used primarily because both BBNA and the Bristol Bay Economic Development Corporation have conducted semi-annual household surveys that result in different and more accurate figures.

| Location              | Code | Incomes < 20,000/yr | Incomes < 20,000/yr | Change Average Income | Average Income | Change Public Assist. | Public Assist. | Change Unemploy Rate | Unemploy Rate |
|-----------------------|------|---------------------|---------------------|-----------------------|----------------|-----------------------|----------------|----------------------|---------------|
|                       |      | 97                  | 98                  | 97-98                 | 97             | 97-98                 | 97             | 97-98                | 97            |
| Aleknagik             | Alk  | 41                  | 62                  | 21                    | 23561          | -5042                 | 24             | -6                   | 15            |
| Chignik               | Chg  | 58                  | 50                  | -8                    | 23921          | 1329                  | 30             | 20                   | 14            |
| Chignik Lagoon        | Cln  | 48                  | 45                  | -3                    | 27571          | -930                  | 10             | 32                   | -14           |
| Chignik Lake          | Clk  | 69                  | 54                  | -15                   | 17219          | 3997                  | 25             | -4                   | 13            |
| Clark's Point         | CIP  | 39                  | 73                  | 34                    | 22591          | -8410                 | 4              | 17                   | 13            |
| Dillingham            | Dlg  | 16                  | 21                  | 5                     | 42185          | 642                   | 4              | 12                   | 11            |
| Egegik                | Egk  | 33                  | 67                  | 34                    | 25538          | -8441                 | 10             | 52                   | 13            |
| Ekwok                 | Ekw  | 59                  | 73                  | 14                    | 22163          | -4401                 | 41             | 5                    | 8             |
| Iliamna               | Ilm  | 67                  | 33                  | -34                   | 21392          | 11692                 | 33             | -22                  | 10            |
| Ivanof Bay            | IvB  | 80                  | 29                  | -51                   | 35600          | -6643                 | 14             | 14                   |               |
| King Salmon           | KgS  | 12                  | 17                  | 5                     | 44613          | -1585                 | 3              | 6                    | 16            |
| Kokhanok              | Kok  | 70                  | 75                  | 5                     | 17292          | -3001                 | 48             | -4                   | 35            |
| Koliganek             | Klg  | 55                  | 75                  | 20                    | 23218          | -11151                | 19             | 13                   | 5             |
| Levelock              | Lvl  | 50                  | 62                  | 12                    | 30927          | -16012                | 22             | 10                   | 6             |
| Manokotak             | Man  | 64                  | 61                  | -3                    | 14718          | 4418                  | 44             | 1                    | 13            |
| Naknek                | Nak  | 20                  | 32                  | 12                    | 42131          | -7872                 | 3              | 20                   | 9             |
| New Stuyahok          | Stu  | 64                  | 83                  | 19                    | 29228          | -17758                | 28             | 9                    | 21            |
| Nondalton             | Nnd  | 88                  | 66                  | -22                   | 15367          | 4832                  | 59             | -16                  | 29            |
| Pedro Bay             | PeB  | 44                  | 33                  | -11                   | 43250          | -4491                 | 6              | 8                    | 13            |
| Perryville            | Pv   | 71                  | 73                  | 2                     | 19722          | -1839                 | 35             | 2                    | 24            |
| Pilot Point           | PIP  | 50                  | 55                  | 5                     | 21273          | -2463                 | 12             | 33                   | 3             |
| Port Heiden           | PIH  | 67                  | 73                  | 6                     | 14736          | 1478                  | 20             | 6                    | 17            |
| South Naknek          | SNk  | 24                  | 32                  | 8                     | 39091          | -7701                 | 3              | 24                   | 8             |
| Togiak                | Tog  | 52                  | 66                  | 14                    | 17482          | 597                   | 24             | 21                   | 27            |
| Twin Hills            | TwH  | 73                  | 91                  | 18                    | 16539          | 1540                  | 27             | 15                   | 20            |
| Total Region          |      | 53                  | 56                  | 3                     | 26066          | -3089                 | 22             | 10                   | 15            |
| Excluding Dlg Nak KgS |      | 58                  | 61                  | 3                     | 23759          | -3109                 | 24             | 10                   | 15            |

The above table and next two pages of bar charts have been obtained from the 1998 Bristol Bay Household Survey prepared by the Bristol Bay Economic Development Corporation, the Bristol Bay Native Association, the Bristol Bay Housing Authority, and the Bristol Bay Native Corporation.



Average Household Income

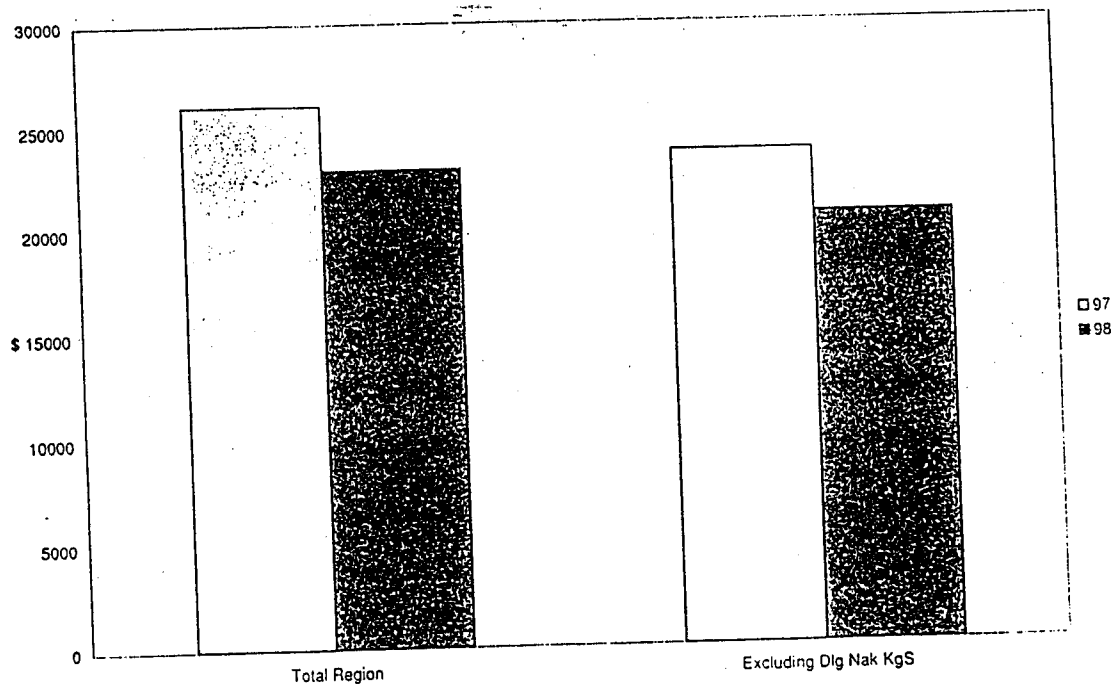
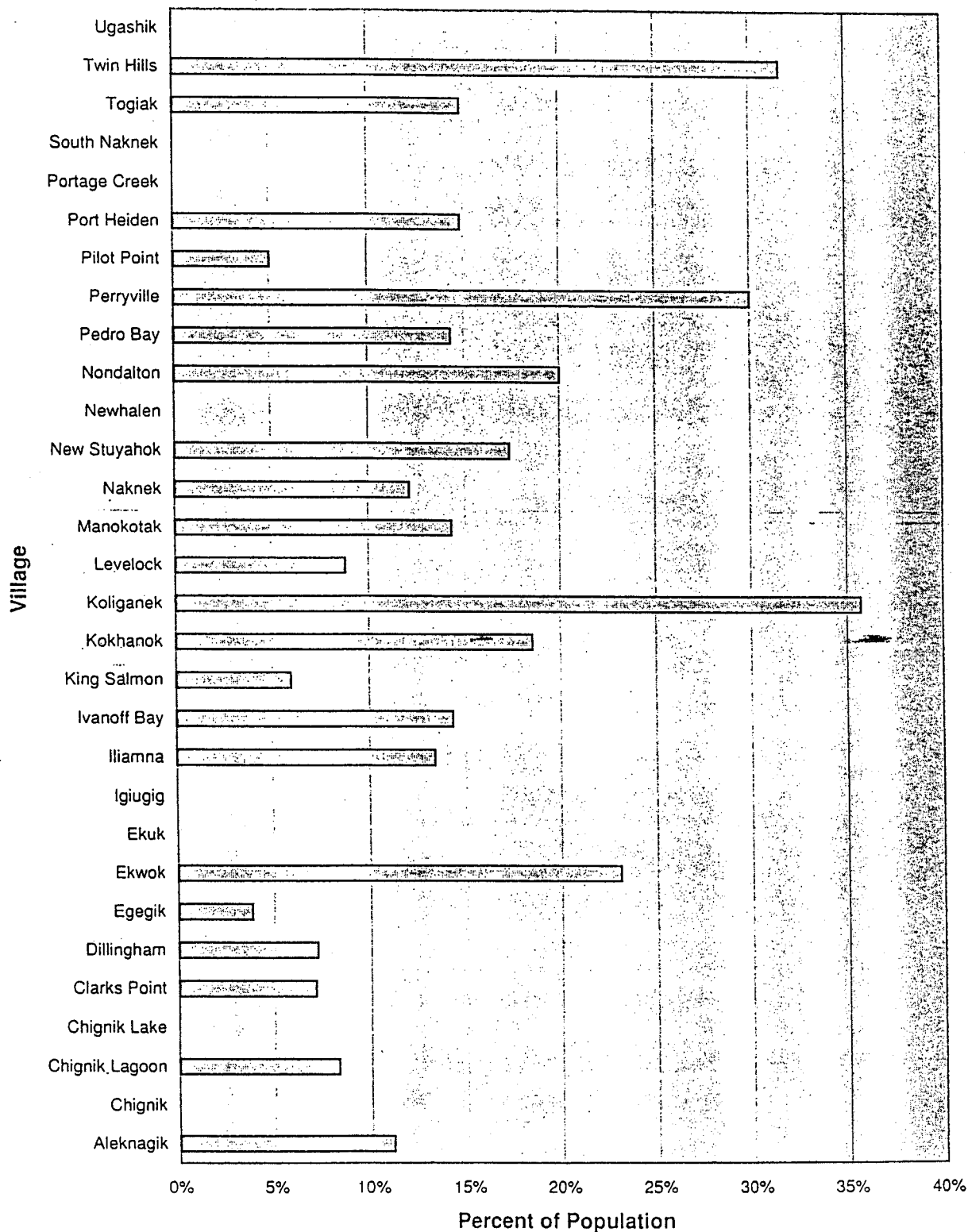




Chart 12: Village Unemployment Rates



## L. The Economic Impacts of BBEDC:

*Information used in this section was obtained from the report entitled: The Community Development Quota Program in Alaska, published in 1999 by the National Research Council, and the web-site [www.cdqdb.org](http://www.cdqdb.org). More specific and detailed information about the Bristol Bay Economic Development Corporation was obtained from Dorothy Wilson, former Deputy Director of the Bristol Bay Economic Development Corporation in Dillingham.*

### The Western Alaska CDQ Program:

In 1992, the North Pacific Fishery Management Council established what's known as the Western Alaska Community Development Quota (CDQ) program. Prior to this program, Western Alaskan coastal communities (including many in Bristol Bay) received no direct economic benefits from the billion dollar bottom-fisheries activities of the Bering Sea. This particular program began with an allocation 7.5% of the total Bering Sea pollock catch to eligible Bering Sea communities, estimated back in 1992 by the North Pacific Fishery Management Council (NPFMC) staff to equal to about \$35 to \$55 million.

In order to qualify as an eligible community, each village must have been located within 50 miles from the territorial sea boundaries of the State of Alaska and on the Bering Sea side of the Alaska Peninsula. Thus, when the CDQ program first began, fourteen (14) Bristol Bay communities qualified to become members of the Bristol Bay Economic Development Corporation (BBEDC). The following communities were eligible:

|               |             |                       |
|---------------|-------------|-----------------------|
| Togiak        | Dillingham  | South Naknek          |
| Twin Hills    | Egegik      | Port Heiden           |
| Manokotak     | Pilot Point | Naknek                |
| Clark's Point | Ugashik     | King Salmon/Sovonoski |
| Aleknagik     | Ekuk        |                       |

Then in 1998, three (3) additional Bristol Bay communities were determined to be eligible for the CDQ program because their initial eligibility was overlooked. They included the communities of Portage Creek, Ekwok, and Levelock.

The following communities in the region do not qualify for the CDQ program:

#### **Iliamna Lake Area:**

Pedro Bay  
Nondalton  
Newhalen  
Iguigig  
Kokhanok

#### **Chignik Area:**

Chignik Bay  
Chignik Lake  
Chignik Lagoon  
Perryville  
Ivanof Bay

**Nushagak River:**

New Stuyahok

Koliganek

The above Iliamna Lake area and Nushagak River communities were not considered eligible because they are located in-land or beyond 50 miles from the State's territorial sea boundary (3-mile limit). Despite all the Chignik area communities being located near-shore (or within 50 miles of the State's territorial sea boundary), they were considered ineligible because they are located on the Gulf of Alaska side, rather than the Bering Sea side of the Alaska Peninsula.

**Brief History of BBEDC:**

In late Nov. 1992, BBEDC was allocated 20% of the 1992 Western Alaska CDQ pollock allocation, or 20,000 tons per year. BBEDC's first CDQ partner, Oceantrawl, Inc., paid BBEDC slightly over \$3 million for its pollock allocation, and has hired thirty Bristol Bay residents on its three (3) factory trawlers. By 1995, if BBEDC pollock sales generated more than \$8 million for BBEDC, and Oceantrawl, Inc., had plans to hire at least sixty or more area residents.

BBEDC established its goal to become a perpetual nonprofit corporation to focus primarily on increasing employment and economic activity to its eligible communities. To accomplish this goal, BBEDC created an Alaskan Seafood Investment Fund and 70% of its CDQ proceeds will be invested in a wide range of seafood industry businesses with the goal of generating dividends. Over time, the return on dividends is expected to make BBEDC self-sufficient.

The remaining 30% of BBEDC's CDQ proceeds will be spent on community development projects. One-third (or 10%) of which would go to set up an educational endowment for vocational training opportunities and scholarships. The balance (20%) will be earmarked for fisheries-related development projects for the eligible communities.

Oceantrawl, Inc., participated with BBEDC as an equity partner in the Alaska Seafood Investment Fund, and promised to provide \$1 of investments made to the Fund for each \$4 invested by BBEDC. Hence, Oceantrawl, Inc., became a 25% equity partner in any venture BBEDC chooses, and participated with the BBEDC in the directorship and management of the Fund, although BBEDC will have a controlling interest of the Board of Directors.

In 1995, BBEDC severed its ties with Oceantrawl, Inc., and began to joint venture and sell its pollock allocation to Arctic Storm, Inc. Since 1992, pacific cod, sablefish, and halibut reserves were also included in the CDQ allocations.

#### Employment and Educational Scholarships:

To date, BBEDC continues to provide at-sea job opportunities for Bristol Bay residents on the vessels the company has purchased, and its joint venture partners. Since its inception in 1992, BBEDC has hired a total of 1,365 people who have completed one or more trips earning a total of \$4,525,839. BBEDC gives its eligible community members a priority in their at-sea job openings, however have hired non-eligible Bristol Bay community members.

BBEDC also offers internships to its eligible community members with Arctic Storm, Icicle Seafoods, Capilano Pacific, and their other joint venture companies. Since 1995, it offered 241 residents internships in Seattle, Anchorage and Bellingham. These interns earned \$1,344,934.00 (some filled more than one internship).

In other regional employment made possible through BBEDC, 13 residents from its qualifying communities earned \$1,810,075 (since 1992, when BBEDC was organized).

BBEDC also spends money to provide educational scholarships to young people in its qualifying communities. Since 1993, it has awarded 175 residents a total amount of \$528,973. Since 1994, BBEDC has provided 2,302 of its qualifying community residents vocational training grants amounting to \$453,768.00, with some being multi-year recipients.

#### Bristol Bay Permit Brokerage:

Soon after it became organized, BBEDC formed the Bristol Bay Permit Brokerage that is administered by Bernice Heyano. Bernice provides financial counseling to commercial fishermen who want to buy boats or permits, or who are facing financial problems. She also helps fishermen buy or sell permits and commercial fishing boats.

#### Bristol Bay Fisheries Development Infrastructure Matching Fund Program:

In 1998, BBEDC formed its Fisheries Development Infrastructure Matching Fund Program. With this program, BBEDC will provide matching funds up to \$100,000 on fisheries development infrastructure projects in their qualifying communities. This includes the construction of docks, harbors, icing machines, boat ramps (and other fisheries-related infrastructure projects).

#### Bristol Bay Regional Business Development Project:

In 1999, BBEDC formed what's called the Regional Business Development Project. This particular project was developed with technical assistance being offered from the Alaska Business Development Center, Inc., and is designed to assist individuals, groups, and

existing businesses to develop or expand seafood related business ventures in their 17 communities.

#### Bristol Bay Ice Machine Project:

Recently, to improve on Bristol Bay salmon quality, BBEDC was recently awarded a \$600,000 Western Alaska Fisheries Disaster grant from the U. S. Department of Commerce, EDA to install ice machines in 6 of its member communities, including an ice barge (BBEDC will provide \$342,000 as matching funds for the machines). This \$942,000 project will enable fishermen to ice down their salmon and receive a better price for their fish. It will also enable fishermen to get into direct marketing, and provide ice to local halibut fishermen.

#### Bristol Bay Science and Research Institute:

BBEDC has organized the Bristol Bay Science and Research Institute, and hired Dr. Michael Link as Executive Director. This particular institute has begun its science and research with Bristol Bay smolt out-migration counts and is currently examining improved sonar counters.

#### Bristol Bay Salmon Fishery Restructuring Study:

In February 2002, BBEDC put together a Bristol Bay Study Group that plans to discuss all options and impacts to restructure Bristol Bay's salmon fishery. The study group will examine permit buybacks, reducing harvesting and processing costs, and complete an analysis to both the negative and positives impacts of restructuring options. BBEDC plans to complete the study by January 2003.

#### Summary:

Although the economic impacts of the Bristol Bay Economic Development Corporation in the Bristol Bay region have been excellent for its 17-eligible member communities, BBEDC cannot provide full and direct benefits (other than at-sea job opportunities) to the region's 12 non-eligible communities. This is not to say that the non-eligible communities have not and will not indirectly benefit from any of BBEDC's fisheries infrastructure development efforts, fisheries research, and the availability of ice machines. Many of the community members from the Nushagak and Iliamna Lake communities travel to these coastal communities to commercially fish during the summer months. It's clear that the 5 Chignik area communities receive very little economic benefits from BBEDC because they have their own distinct and separate commercial salmon fishery.

## **V. New Potentials and Problems**

### **A. Fisheries Development:**

#### **1. Restructuring Bristol Bay's Salmon Fishery:**

It's clear that in order to compete with farmed salmon, Bristol Bay's salmon industry must make major structural changes to its fisheries otherwise its fishermen will not survive.

An option Bristol Bay drift fishermen have is to find ways to reduce their harvesting costs. At the end of each fishing season, most Bristol Bay drift fishermen are confronted with average operating expenses of about \$15,000 (not including boat payments). Multiplying today's low salmon prices with the low projected 2002 harvest, divided by the number of drift fishermen expected to participate, average gross earnings will be equal to about \$12,000. Fishermen who don't have boat payments will come close to breaking even. Fishermen who have boat payments won't be able to make their boat payments.

At the forefront of structural changes being made to Alaska's salmon fisheries is the recently approved Chignik salmon cooperative concept. In this fishery, if 51% or more of the Chignik seine permit holders join the cooperative, they would be allocated a percentage of the harvest based on the number of permit holders who have joined the cooperative. However, not all fishermen in the cooperative will be required to fish. For instance, if 70% of the permit holders join the cooperative, they can have just 25 boats fish their allocation, and the proceeds of the harvest will be divided equally among all members.

Wild sockeye salmon are destined to come back to every year to Bristol Bay, and the area will always have a commercial sockeye salmon fishery, however making no structural changes to the fishery is not an option. There are too many boats, not enough fish, and salmon prices are expected to remain low well into the future. Because of low salmon prices, last year 300 drift permit holders didn't fish. This year it's anticipated that as many as 500 to 600 drift permits won't fish. That doesn't mean that these permit holders will be gone forever. Once the salmon runs come back strong again, these permit holders can rejoin the fishery, resulting in lower average boat catch levels, and making it difficult to for drift fishermen to survive once again.

The Alaska Commercial Fisheries Entry Commission (CFEC) is now conducting an optimum numbers study for the Bristol Bay drift fishery. In April 2002, they mailed out a survey to drift permit holders selected by random to collect information on fishing expenses. This study will help to identify the optimum number of harvesters that should be permitted to participate in the fishery. If a buyback program is instituted for the fishery, CFEC officials feel they would have a better chance of overcoming a court challenge if one were issued against the buyback program.

Thanks to BBEDC, the local CDQ group recently completed a study of all options available to restructure Bristol Bay's salmon fishery. The study reveals the pros and cons of various restructuring options and their findings.

## **2. BBNA's USDA Intermediary Relending Proposal:**

With Bristol Bay salmon drift permit values having crashed from a high of \$248,000 in 1989 to about \$30,000 recently, BBNA's full board has concluded now is the time to establish a Bristol Bay/Chignik Salmon Permit Revolving Loan Fund.

Since limited entry was established in the fishery, local area residents were issued a total of 1,378 permits. Today, area residents own about 800 permits, or there's been a loss of 478 permits. This out-migration of permits erodes the region's economy and every community from which a permit is sold outside the region.

There are young people in many communities of the region who are experienced crewmembers and can do well as captains. If they know how to effectively manage money, and don't become saddled with overcapitalized operations in the fishery, they can make money from the fishery. While drift permits have crashed in market value, set net permits market values have dropped only slightly primarily because set net fishermen aren't faced with high overhead costs. They own primarily 24' open skiffs and use outboard motors to harvest fish.

## **3. Perryville's Ice Making and Dispensing Machine:**

In the Chignik area of Bristol Bay's region 5 communities have access to a pacific cod computerized jigging fishery or pot fishery. The 40 fishermen in the area generally have a tender that arrives from Sand Point to buy their pacific cod. The problem is that generally the tender that services them doesn't have sufficient quantities of ice to enable fishermen in the area to properly ice down their catch.

The community of Perryville would like to obtain grant funds to purchase a ice making machine that has its own diesel generator to service area fishermen. In this instance, the community would only have purchase fuel for the ice-making machine.

## **B. Mineral Development:**

### **1. Pebble Copper:**

There have been some new developments with Pebble Copper. First, the Cominco Mining Company merged with the Teck Mining Company and formed Teck Cominco. Secondly, Teck Cominco plans to drill 30 more core samples south of the present Pebble Copper deposit by next summer. The results of these core samples will be used to determine

the economic feasibility of the mine.

This is a world class copper and gold deposit. It's no longer a question of whether it's going to happen or not, but when will it happen. Copper prices on the world market currently remain low. In 1992, the Cominco Mining Company announced the discovery of this deposit near Iliamna. Called "Cominco's Pebble Copper", if this mine is developed, it will become the largest single economic development project in the Bristol Bay area. Cominco estimates the project will require 1,000 to 1,500 workers for the first 2 to 3 years, and then require 400 to 500 workers. If developed, this mine is expected to span 20 years, and cost \$920 million - \$800 million for infrastructure development and an additional \$120 million for roads and port development. The life of the project is expected to span 20 years, and will become Alaska's largest open pit mine - one that could be seen with the naked eye from the moon.

Cominco expects that the peak electrical power requirements for this potential mine will be about 50 MW. To put this into perspective, Dillingham current peak power needs are about 3.5 MW, so Cominco Pebble Copper's power requirements will be over 14 times greater than Dillingham's current peak power needs. Because most jobs on this project will require trained and skilled employees, we must also insure that Cominco trains and hires area residents to work on this project.

This project can also have long-term adverse impacts our rivers, salmon, and freshwater fish, so thorough environmental impact studies must be done. BBNA's Planner will continue to monitor any work being done by Cominco on the potential mine.

## **2. Shotgun Hills Gold Deposit:**

On Oct. 21, 1998, NovaGold Resources Inc., a junior mining company based out of Dartmouth, Nova Scotia, announced a million-ounce gold discovery at the Shotgun Hills area of our region. According to NovaGold, the discovery will take three more years of exploration work (drilling core samples), then another year to complete a preliminary feasibility study, followed by another year to complete a final feasibility study.

The deposit is located near the ground surface, and NovaGold plans to continue drilling core samples to see if additional gold can be found at the site. NovaGold claims to have a patented enclosed facility to extract gold from ore, which will result in less impact on the environment. With Bristol Bay chum, king, and pink salmon known as river spawns (as compared to sockeye primarily known as lake spawners), and Nushagak villagers relying heavily upon freshwater fish for subsistence, it's imperative that thorough environmental impact studies be conducted on the prospective mining operation.

Because of weak gold prices, NovaGold has decided not to continue any exploratory work on the site.



### 3. BBNC's Mineral Development Synopsis:

The following is a brief description of the position the Bristol Bay Native Corporation on mineral development in the region, produced by Paul Roehl, Vice President of Lands and Resources, the Bristol Bay Native Corporation, Anchorage:

**Hard Rock Minerals** – *Since exploring for and developing mineral deposits requires multi-million dollar capital outlays, BBNC's policy is to entice outside mineral exploration and mining companies to perform any exploratory and mine development work on BBNC's lands. In the mid-1980's, BBNC entered into an exploration agreement with Resource Associates of Alaska to identify and explore mineral targets in the Bristol Bay region. Several prospects were identified, but because of their remote locations and relatively low ore grades, they were deemed uneconomic to develop.*

*Currently, BBNC has an agreement with Bristol Environmental and Engineering Services Corporation to, among other things, compile and market BBNC's known mineral resource information. BEESC has assigned geologist Greg Beischer to assist BBNC in its efforts. Mr. Beischer is confident that he can capitalize on his contacts to bring mineral exploration activity back to the Bristol Bay region. BBNC will not support any exploration or development work that may adversely affect salmon habitat and resources.*

**Pebble Copper Exploration** – *Canadian mining company Northern Dynasty Minerals, Ltd. recently acquired an interest in the Pebble Copper deposit from Teck-Cominco. The Pebble Copper deposit is located northwest of Lake Iliamna. Beginning next summer, the company plans to drill a series of forty test holes throughout the greater resource area.*

*Northern Dynasty hopes to discover high-grade zones that could prove to be economic to develop. To its credit, Northern Dynasty has been forthcoming with news of their program, and it plans further informational meetings in the region as the time for the exploration program approaches. Bruce Youngman, Vice-President of Northern Dynasty, has been careful to point out that this is an early stage exploration program. If their exploration efforts prove to be successful, development would still be many years away.*

**Shotgun Hills ("Mose") Gold Deposit** – *NovaGold Resources, Inc. ("Nova") in 1998 discovered a one million ounce gold deposit in the Shotgun Hills area, located approximately 50 miles northwest of Koliganek. Due to its remote location and low 0.5 – 1 gram per metric ton estimated gold recovery rate, any further work on the Mose deposit has been put on hold. Nova has since bought an ownership position in Placer Dome's Donlin Creek deposit in the Calista region.*

**Oil and Gas Development** – *Similar to its hard rock minerals policy, BBNC does not want to risk losing millions of dollars by unilaterally drilling for oil or gas. BBNC aims to lure oil and gas exploration companies into the Bristol Bay region.*

*Though the offshore Bristol Bay basin (OCS 92) is regarded as a good prospect for drilling, the Bristol Bay uplands are not as highly regarded. Between 1905 and the mid-1970's, approximately 30 exploratory holes were drilled on the Alaska Peninsula, none of which indicated commercial quantities of oil or gas.*

*BBNC is keen to responsibly developing its potential oil and gas resources. We've been in contact with a couple of oil exploration companies in the past two years. Though we haven't reached agreement with either company, we are cautiously optimistic that we will see an exploration program in the not-too-distant future.*

#### **4. BBNC's Mineral Mapping Project:**

As indicated in the Bristol Bay Economic Recovery Plan, recent mineral discoveries have been made in the region. In 1991, the Cominco mining company announced the discovery of a world-class copper/gold deposit called Pebble Copper near Iliamna. In 1998, NovaGold Resources Inc. announced a million-ounce gold discovery in the Shotgun Hills area of the Upper Nushagak River. In 2001, the U. S. Geological Survey (working in conjunction with BBNC and DuPont) collected and analyzed samples of surface minerals in the region, and black sand deposits were found in the region containing titanium oxide.

As a result of these recent discoveries, the Bristol Bay Native Corporation (the region's ANCSA regional corporation) would like to produce a computerized Geographic Information Systems Information (GIS) database of the region's mineral potential. This multi-phase program will consist of the digitization of current mineral information, data interpretation, and the production of maps for key quadrangles in the region. Once completed, this information will be made available to mining companies for the purpose of conducting further exploration work in the region.

These funds will also be used to document the region's hydrocarbon potential. In the past, there's been more than 30 oil wells drilled in the region by oil companies with some wells hitting known gas reserves, and BBNC would like to quantify this information.

#### **C. Southwest Alaska Vocational/Technical Training Center:**

Back in 1994, when the U. S. Department of Defense was making defense cuts, it decided to "mothball" the King Salmon Air Force Base. The Bristol Bay Housing Authority

(BBHA) then began working towards obtaining one of its buildings to establish a Southwest Alaska Vocational/Technical Center. In July of 1998, the U. S. Housing and Urban Development Department granted BBHA \$2 million to renovate the facility into a Center. Then 2000, BBHA received an additional \$1.2 million from the U. S. Department of Commerce, EDA to dispose of hazardous materials and upgrade the facility's electrical system. Recently, the Center received a \$700,000 grant from USDA to purchase needed equipment for the facility. Today the facility is about 99% complete, and BBHA is now working to obtain operational funds for the Center.

Last fall, the Center graduated 30 oil platform "roustabouts." Sometime down the road, the center also plans to offer U. S. Coast Guard six-pak license training programs. These licenses are required of guides who take clients out sport fishing or sight seeing in boat. Guides who operate in rivers and lakes must have a Remote Waters of Western Alaska six-pak license. Guides who operate near-shore must have a regular six-pak Charter Captain license, or Operator of Uninspected Passenger Vessel (OUPV) license.

Another goal of the Center is to receive FAA housing units at the site to be used for married student housing, day care, including an alcohol treatment program.

#### **D. Dillingham Small Business Development Center:**

The creation of new small businesses in the region's area communities is a critical component to improving village economies. These centers will assist area residents startup small businesses. They will assist residents develop small business plans and marketing plans for grocery stores, small engine repair shops, ATV rental shops, bed and breakfasts, skiff and outboard motor rentals, sport fishing operations, charter operations, etc.

The University of Alaska, Anchorage, has calculated that it will cost \$185,908 per year to operate a Dillingham Small Business Development Center for a year. BBNA has approached the Small Business Development Center (SBDC) and USDA to co-locate an office in Dillingham for the next 4 years.

#### **E. Tourism Development:**

##### **1. Bristol Bay Tourism Inventory:**

As a project of the Bristol Bay Visitors Council, Chris Beck and Thea Agnew have been working to complete a Bristol Bay tourism inventory. The inventory will include a regional description and community information. It will include a summary of "Bristol Bay best places/best activities" (e.g. Katmai bears, rafting the Newhalen River, flying through Lake Clark Pass, Walrus Islands, Togiak Village Tour, floating the Aniakchak Caldera, the Wood Tikchik State Park, etc.)

Both Chris Beck and Amy Tomson are now preparing a draft of the inventory that will be posted on BBNA's web site at [bbna.com](http://bbna.com) to enable villagers to comment on the inventory. Efforts will also be made to secure funds to produce printed copies of the regional inventory. The Bristol Bay Visitors Council believes this inventory will be a "first" for the region.

## **2. New Stuyahok's Cultural Facility:**

The community of New Stuyahok wants to construct a cultural facility. As a component to the facility, they want to construct a "qasriq", or traditional Eskimo community house. The community held a meeting with Brenda Akelkok, BBNA's Program Planning and Development Director and the following has been taken verbatim from her trip report: Brenda indicates she had a meeting with:

...Representatives from the village, city and corporate leaders, an elder, a student representative, teachers and the clergy. All expressed interest in addressing some necessary questions in organizing to construct a Qasgiq for New Stuyahok:

1. What should the Qasgiq look like?
2. Where should it be located?
3. How is site control and land ownership addressed?
4. How will the building be used?

Some suggestions for activities that might take place within the Qasgiq included after school activities for the youth, a place for elders to join them there, teaching traditional activities, a possible eco-tourism site if there is tourist interest, a place to showcase artifacts and arts and crafts like a multi-cultural building, presentations by elders, traditional dances, a meeting and gathering place.

The group next considered possibilities of what the Qasgiq should look like. One suggestion was that it be built in the old traditional style with traditional materials. It was recalled by some that the Qasgiq is usually in a circular or oval shape with a balcony and also a round central floor that was encircled by an attached bench-like rail where dancers rested during long festivities.

Another possibility considered was a more modern building designed along the traditional structure of the old-style Qasgiq but with modern amenities such as plumbing and electrical wiring.

Who decides the type of structure? Since there was more than one option under consideration for the type of structure, there was a suggestion for a building committee. There seemed to be agreement that membership on the committee would include community members, school, and elders who are familiar with the Qasgiq's use in the village such as Wassillie Hanson and Nick Wyagon.

Brenda was asked to investigate the Qasgiq built at Tutalgaq (Pilot Station). Father Askoak has contacts in that village. Pilot Station constructed a large modern building for a Qasgiq in a circular design. Teacher Emma Stevens shared pictures of the structure after the meeting. Community members suggested that New Stuyahok might benefit from using the existing architecture and design work done by Pilot Station.

Another suggestion was to build both types of structures: an old style Qasgiq of local materials next to a more modern structure with electricity and plumbing conveniences. Elder Nick

Wyagon said that the traditional Qasgiq must have a bearskin over the door.

Another participant suggested that the Qasgiq be built near where the new school would be constructed if the school construction ballot initiative passed. Teacher Emma Stevens said that in her native homeland of New Zealand, the Maoris built their traditional buildings next to the school so the children could visit it to learn the culture. She said the children's behavior was totally different from in school because they followed cultural protocols of respect when in the traditional gathering place.

The meeting attendees next considered options for the use of the Qasgiq. Should it be used as a tourist attraction like at Togiak where their cultural center even has a small store for sale of arts and crafts? Would community members want it to serve a museum type purpose by having space to display artifacts appropriately? A suggestion from a community member would be to let the elders decide and report back, adding that the elders could serve as the backbone for planning decisions.

Phases and Timing in the Qasgiq Development was discussed. The Timeline will most likely be:

- a. Get planning grant applications in by the January 2003 deadline. Possible funding for the Architect and Engineering to be received by late August 2003.
- b. Meet with Architect in Fall 2003 to have blueprints, engineering and design done by November 2003.
- c. Actively solicit for construction funds.
- d. Summer 2004 Construction season.

One person volunteered that a plan for the maintenance and operation of the facility will be important. Brenda suggested that there might be some monies through the Institute of Museum and Library Services if they were also going to display artifacts and cultural items. If tourism is integrated into the plan for the facility, the village could charge admission for watching scheduled performances or work out an arrangement with tour operators and interested lodges. Artists selling their crafts through the facility could pay a percentage of a consignment fee if a small crafts store is set up inside as well.

A major outcome of the community meeting is that a Building Committee was formed. The following people were suggested, to be confirmed by contacting those not in attendance directly:

Committee

Moxie Andrew  
Evon Wonhola  
Chuck Peterson  
Sheila Nicketa  
James Acovak

Elders

Nick Wyagon  
Wassillie Hanson  
Mike Acovak  
Yako Eneyuk  
Yako Gust  
Gust Blunka  
Wassillie Chunak, Sr.

## **VI. Development Strategy**

BBNA's CEDS committee considers the following economic development planning areas to be priorities in the region:

**1. Continue to work with BBNA's senior management to continually update BBNA's Bristol Bay Economic Recovery Plan.**

**2. Work to rebuild the region's fishing economy:**

- A. Actively participate in meetings related to the restructuring and rebuilding of Bristol Bay's commercial salmon fishery.
- B. Work to secure funding for BBNA's USDA Intermediary Relending Proposal to provide greater financing opportunities for Bristol Bay residents to purchase limited entry fishing permits.
- C. Provide market updates on Bristol Bay salmon and herring prices, forecasts, and market conditions to the *Bristol BayTimes*, KDLG radio station, and *BBNA's Newsletter*.

**3. Work to diversify the region's economy:**

- A. Continue to organize regular meetings of the Bristol Bay Visitors Council
- B. Seek funding for BBNA's Tourism Development Planner to continue tourism development work in the villages of the region.
- C. Continue to monitor any development activities of Cominco's Pebble Copper discovery north of Iliamna and NovaGold's Shot Gun Hills gold discovery in the Upper Nushagak area.

**4. Work to improve upon the region's public infrastructure needs.**

- A. Coordinate efforts with the local tribal councils and municipalities, the Denali Commission, the Alaska Federation of Natives, and Alaska's Congressional Delegation to improve on the region's transportation infrastructure needs.
- B. Coordinate efforts with BBNA's management staff to secure funds to enable Bristol Bay communities to develop long-term economic development and infrastructure development plans.

- C. Work with the community leaders to examine the feasibility of cultural facilities and museums in Dillingham, New Stuyahok, Naknek/King Salmon, and Aleknagik.
  - D. Continue to organize two meeting per year of BBNA's Bristol Bay Alternative Energy Task Force to address the region's high-energy costs.
- 5. Provide small business information and referral assistance to the area residents.**
- A. Work with BBNA's management staff to secure funds to enable the Small Business Development Center to establish an office in Dillingham.
  - B. Coordinate efforts with Bernice Heyano of the Bristol Bay Economic Development Corporation to provide information about BIA's Loan Guaranty Program to eligible Native residents in the region.
- 6. Work on the economic development projects identified in BBNA's June 30, 2003 Comprehensive Economic Development Strategy, and update this document by June 30, 2004.**
- 7. Provide assurances that any economic development project will not jeopardize or adversely impact the subsistence lifestyle in the region.**
- 8. Continually contact Alaska's EDA Representative to inform him about plant closures and potential EDA grant projects that could be funded in the region**

## **VI. Work Plan**

|       |  |  |
|-------|--|--|
| Year  | 2003   | 2004   |
| Month | <u>A</u> <u>S</u> <u>O</u> <u>N</u> <u>D</u> | <u>J</u> <u>F</u> <u>M</u> <u>A</u> <u>M</u> <u>J</u> <u>J</u> |

### **ACTIVITY:**

1. Continually coordinate efforts with BBNA's senior management to update the Bristol Bay Economic recovery plan-----continuous process----->
2. Actively participate in meetings that relate to the restructuring of Bristol Bay's commercial salmon fishery----- continuous process ----->
3. Assist BBNA's management staff with its USDA Intermediary Relending Proposal-----continuous process----->
4. Continue to provide updated market information on Bristol Bay salmon and herring to the Bristol BayTimes, KDLG, and BBNA's Newsletter-----continuous process----->
5. Continue to organize regular meetings of the Bristol Bay Visitors Council-----continuous process----->
6. Coordinate efforts with community leaders to examine the feasibility for cultural facilities or museums in the region-----continuous process----->
7. Seek funding for BBNA's Tourism Development Planner to continue tourism development work in the region's villages.-----continuous process----->
8. Continue to organize two meeting per year of the Bristol Bay Alternative Energy Task Force-----continuous process----->
9. Continue to provide small business and referral assistance to area residents -----continuous process----->
10. Continue to monitor any development work done on Pebble Copper and Shotgun Hills -----continuous process----->



|       |  |  |
|-------|--|--|
| Year  | 2003   | 2004   |
| Month | <u>A</u> <u>S</u> <u>O</u> <u>N</u> <u>D</u> | <u>J</u> <u>F</u> <u>M</u> <u>A</u> <u>M</u> <u>J</u> <u>J</u> |

11. Work with BBNA's management staff to secure funds to enable Bristol Bay communities to develop long-term economic development and infrastructure development plans-----continuous process----->
12. Coordinate efforts with BBNA's management staff to establish a Small Business Development Center office in Dillingham-----continuous process----->
13. Update BBNA's Comprehensive Economic Development Strategy by June 30, 2004 -----continuous process----->
14. Make sure that economic development projects in the region don't adversely affect the region's subsistence lifestyle and economy-----continuous process----->
15. Inform Alaska's Economic Development Representative (EDR) about plant closures in the region, economic changes, and potential economic development projects-----continuous process----->

### **VIII. Evaluation of Planning Program**

BBNA's Planning Program is evaluated several ways "in-house" each year.

#### **1. Work Performance:**

The supervisor to BBNA's Planner is Terry Hoefflerle, Chief of Operations. He evaluates the effectiveness of the Planner. For every 1,950 hours of work at BBNA, every permanent employee receives a pay increase of \$500 per year contingent upon a positive evaluation of work performance.

Terry Hoefflerle, BBNA's Chief of Operations, evaluates the effectiveness of BBNA's Planner. BBNA's Planner is required to submit written monthly reports to Mr. Hoefflerle. The monthly reports summarize the work activities of the Planner, and are forwarded to every village in the region. They include the major tasks and accomplishments of the Planner, and expected work tasks in the near future. The Planner also identifies any major problems he's currently having or will have with the planning program, and how the Planner expects to overcome the problems.

#### **2. Program Goals and Objectives:**

Every fall, BBNA's Planner is required to establish its Program Goals and Objectives for the fiscal year (this is required by all other BBNA's program directors). These proposed goals and objectives are then reviewed by BBNA's full board of directors when it meets twice a year - both during the fall and spring months. When BBNA's full board meets in the fall time, it approves the goals and objectives. Then when the full board meets in the springtime, it reviews the accomplishments of the program's goals and objectives.

BBNA's 12-member Comprehensive Economic Development Strategy (CEDS) Committee also reviews and approves the goals and objectives of BBNA's Planner. This committee also provides recommendations on new planning projects for Planner to work on.

#### **3. Regional Economic Reports:**

Whenever BBNA's full board of directors meet twice a year, BBNA's Planner prepares a written report on the state of the region's economy. This report includes an update on economic disaster planning activities, salmon and herring prices, tourism and mineral development activities in the region. This report also usually includes an update on the economic development activities of the Bristol Bay Economic Development Corporation - the local Western Alaska Community Development Quota group. He also gives an oral report to BBNA's full board of directors.

BBNA's planning program is also evaluated two ways by U. S. Department of

Commerce, Economic Development Administration staff members.

### **1. Narrative Reports:**

BBNA's Planner is required to submit two narrative reports per year to Bettye Atkinson, Chief of Planning and Technical Assistance of the EDA Seattle Regional Office. A Mid-Point Progress Narrative Report is submitted by December 31 of every year, then a Final Progress Report by June 30 of every year. Both reports are copied and submitted to Berney Richert, Alaska's EDA Representative based in Anchorage, Alaska. In both reports, the Planner points out if the goals and objectives have been met for the year, or any problems encountered trying to achieve the goals and objectives.

Inclusive of these narrative reports are the meeting minutes of BBNA's CEDS Committee, and other minutes of committees that BBNA's Planner works with in his program. Such usually include the meeting minutes of the Bristol Bay Visitors Council; the Bristol Bay Alternative Energy Task Force; and BBNA's recently formed Fish Committee and Economic Development Committee.

### **2. Comprehensive Economic Development Strategy:**

By June 30 of every year, BBNA's Planner is also required to complete and submit a Comprehensive Economic Development Strategy (CEDS) to the EDA Seattle Regional Office. The CEDS document identifies changes to the region's economy, and reports on new economic development potentials and problems developing in the region. It also provides an annual work plan for BBNA's Planner. BBNA's CEDS Committee and BBNA's board of directors must approve this document by resolution, and a copy of this document is mailed to Berney Richert.

BBNA's evaluation of the Planner usually includes the composition of his regional economic reports, accomplishments identified in the Narrative Reports, and the effectiveness of BBNA's annual Comprehensive Economic Development Strategy.

## **IX. Environmental Issues**

Because the area's commercial salmon fishery is so important to the region, protecting the salmon migratory routes and spawning grounds from environmental impacts are considered paramount to the area residents.

The same holds true with the Togiak herring fishery. This fishery has provided additional income to Bristol Bay fishermen since its inception in the late 1970's, and when herring prices are good, about 1/3 of all Bristol Bay fishermen participate in the fishery. Its roe-on-kelp fishery has also provided additional income to residents in Togiak, Twin Hills, Manokotak, and Dillingham. As a result, area residents feel that both the tidal and sub-tidal herring spawning grounds extending between Cape Constantine to Cape Newenham must be protected from oil spills or hazardous wastes.

Land use policy statements prepared by the Lake and Peninsula Borough, the Bristol Bay Borough, the Alaska Department of Fish and Game, the U. S. Fish and Wildlife Service, and the Bristol Bay Coastal Management Program, rank the protection fish and habitat and salmon spawning grounds has the highest priority in the area.

The majority of the communities within the region fall within the boundaries of the Bristol Bay Borough and Lake and Peninsula Borough, and both boroughs have adopted and recognized coastal management plans. These are the guidance documents for these communities – not the Bristol Bay Coastal Management Plan drafted by the Bristol Bay Coastal Resource Service Area. Although the enforceable policies of the three plans may compliment one another, one plan is not all encompassing.<sup>4</sup>

BBNA's CEDS committee considers the existing Bristol Bay Coastal Management Plan (BBCMP), prepared by the Bristol Bay Coastal Resource Service Area (CRSA) board, as the working document to address environmental issues in the area. Briefly, the BBCMP is part of both the Alaska Coastal Management Act of 1977 and the Coastal Zone Management Act of 1972. Both acts assure for the proper management and use of the area resources.

The BBCMP received federal approval in February of 1987, and was included in the Alaska Coastal Management Program (ACMP) on February 17, 1987. The following is an encapsulation of their goals and number and type of policies:

### **GOALS**

**FISH AND WILDLIFE:** Maintain and enhance the natural productivity of fish and wildlife

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<sup>4</sup> Letter to Andy Golia from Arne G. Erikson, Community Development Planner, Bristol Bay Borough, dated March 22, 2001.

populations and habitats.

SUBSISTENCE: Maintain the opportunity to continue the subsistence lifestyle in the Bristol Bay region.

SETTLEMENT AND COASTAL DEVELOPMENT: Maintain opportunities for the expansion of existing communities, and the location of new facilities in low hazard areas that will not lead to significant adverse impacts to fish and wildlife populations and habitat.

OIL, GAS, & MINERAL: Maintain opportunities to explore and develop the region's oil, gas, and mineral resources in a manner that will benefit the area's communities, its residents, and will not adversely impact fish and wildlife populations and habitat.

TRANSPORTATION: Upgrade the existing transportation system to better serve the region's needs, and in such a way as not to adversely impact fish and wildlife populations and habitat. Maintain the region's separation from the state road system.

ENERGY: Encourage the conservation and the efficient use and development of energy that will not adversely impact fish and wildlife populations and habitats.

RECREATION: Maintain the region's wide variety of high quality and variety of recreational opportunities to meet the needs of local residents as well as state, national, and international visitors.

HISTORIC/ARCHAEOLOGICAL RESOURCES: Preserve the important historic and archeological sites and artifacts of the regions.

## POLICIES

The following policies have been taken verbatim from the Bristol Bay Coastal Management Program. Volume 2 - Management Plan, pages 6-7 to 6-14, completed by the Bristol Bay Coastal Resource Service Area Board on October 1984.

### **COASTAL DEVELOPMENT (6 AAC 80.040)**

1.1 Before approving projects and activities in the coastal area, physical conditions such as soil characteristics, slopes, geological features, surface and subsurface drainage, water tables, floodplains, and shore-forms will be inventoried and used to specify mitigation measures for construction and operations.

1.2 When planning for and approving development in coastal areas, priorities will be given in the following order to:

- a) water-dependent uses and activities;
- b) water-related uses and activities;
- c) uses and activities, which are neither water-dependent nor water, related, but for which there is no feasible and prudent alternative to meet the public need.

1.3 In order to minimize negative impacts on water quality and public access, projects adjacent to public water supplies, fish habitat, and waters used for public recreation will maintain a setback adequate to protect these uses. This setback will, to the extent feasible and prudent, be at least 100 feet landward of the ordinary high water mark. Where it is not feasible and prudent to maintain the setback, other measures will be implemented to accomplish the purpose of this policy. This setback requirement does not apply to projects that require an over-water or water edge location, nor does it preclude or restrict necessary stream, river, or lake crossings. Any setback requirement contained in Alaska Department of Environmental Conservation regulations remains in effect. Compliance with Fish Guideline #2 contained in the Alaska Department of Natural Resource's Bristol Bay Area Plan (1984) will also achieve compliance with this policy.

1.4 Projects that require dredging or filling in streams, rivers, lakes, wetlands, or saltwater areas including tide-flats, will be located, designed, constructed, and maintained in a manner so as to:

- a) avoid significant impacts to critical fish and wildlife habitat;
- b) avoid interfering with fish migration, spawning;
- c) limit areas of direct disturbance to as small an area as possible;
- d) minimize the amount of waterborne sediment traveling away from the dredge or fill site;
- e) maintain flow or circulation patterns;
- f) provide for the movement of water across a fill area.

1.5 Dredged materials disposed inshore will be diked or similarly contained and stabilized in order to prevent erosion or leaching into fish-bearing waters.

1.6 To the extent feasible and prudent, structures in or over streams, lakes, rivers, wetlands, or saltwater including tide-flats, will be located, designed, constructed, and maintained in a manner so as to:

- a) avoid decreases in water quality;
- b) avoid disturbances to fish and wildlife migration, spawning, and rearing; and
- c) avoid interference with navigation and fish harvesting activities.

1.7 Public land made available for settlement will be located and designed so as to:

- a) avoid endangering human life and property;

- b) maintain to the greatest extent possible fish and wildlife productivity; and
- c) minimize conflicts with existing uses, especially subsistence use.

1.8 Before designating public lands to be disposed of for settlement purposes, government agencies will consult with the CRSA Board in determining:

- a) the market for public land;
- b) the type of disposal that meets the needs of the people in the area;
- c) the specific location within the designated disposal area; and
- d) the timing and design of the disposal.

### **GEOPHYSICAL HAZARDS (6 AAC 80.050)**

1.1 Projects located in known geological hazard areas must incorporate siting, design, and construction measures which will protect against the loss of human life, property damage, and the potential loss of fish and wildlife populations and habitats.

### **RECREATION (6 AAC 80.060)**

3.1 Rivers, lakes, and streams are recognized as the most important recreational use areas in the district. Hunting and fishing are recognized as the dominant recreational activity. Projects and activities in these areas, including commercial recreational use, will be located, designed, and conducted in a manner so as to minimize the adverse impact on existing fish and wildlife populations and on subsistence use. At a minimum, this includes maintaining public access, water quality, fish migration, rearing, and spawning areas, historic and geological features, and scenic values.

### **ENERGY FACILITIES (6 AAC 80.070)**

4.1 Geophysical surveys on land will, to the extent feasible and prudent, be located, designed, and conducted in a manner so as to avoid disturbances to fish and wildlife populations, habitats, and harvests. Seasonal restrictions, restrictions on the use of explosives, or restrictions relating to the type of transportation utilized in such operations will be included as necessary to mitigate potential adverse impacts.

4.2 Geophysical surveys in fresh and marine waters will require the use of non-explosive energy sources such as air guns, gas exploders, or other sources that have been demonstrated to be harmless to fish, seabirds, and marine mammals. Blasting for purposes other than geophysical surveys will be approved on a case-by-case basis after all steps have been taken to minimize impacts and when no feasible and prudent alternative exists to meet the public need.

4.3 Vessels engaged in offshore geophysical exploration would conduct their operations

in a manner so as to avoid interfering with commercial fishing activities.

Lease free buffer zones in or adjacent to critical habitat will be an alternative evaluated when an area is to be offered for lease.

Energy facilities will be sited, designed, constructed, and maintained so as to avoid significant adverse impacts to fish and wildlife populations. Oil and gas exploration and production wells will be located so as to avoid interfering with commercial fishing and subsistence harvests within the Bristol Bay Fisheries Reserve (established per AS 38-05.141), the Togiak and Chignik Bay commercial fishing districts regulated by the Alaska Department of Fish & Game, and within Port Heiden Bay. In all other offshore areas, such interference will be avoided to the extent feasible and prudent. In addition, oil and gas exploration and production wells will be located in areas where drilling wastes, oil spills, or other forms of contamination resulting from these activities will not endanger drinking water supplies or critical habitats identified on Maps 7 & 8 (Volume 1).4.4.

Critical fish and wildlife habitat will be leased for energy development only if it is determined that subsequent exploration and development would be compatible with the maintenance of such populations and habitat.

4.6 Oil produced in offshore areas will not be stored offshore, but will be transported to shore via pipeline, unless a pipeline is determined to have a greater potential for adverse environmental impact.

4.7 Offshore pipelines and other sub-sea structures will be designed or protected so as to allow trawling gear to pass over without snagging or otherwise damaging the structure or gear.

4.8 Pipelines and pipeline rights-of-way will, to the extent feasible and prudent, be sited, designed, constructed, and maintained in a manner so as to prevent risk to fish populations and their spawning, rearing, and over wintering areas from a spill, pipeline break, or other construction activities. Pipelines crossing fish-bearing waters will incorporate specific measures to minimize the amount of oil, which may enter such waters as a result of a pipeline, break.

4.9 Pipelines that cross critical caribou or moose habitat will, to the extent feasible and prudent, be buried wherever soil and geophysical conditions permit. Pipelines that cannot avoid critical caribou or moose habitat and cannot be buried due to soil or geophysical conditions, will be designed and constructed in a manner that has been demonstrated to provide free movement and safe passage for caribou and moose.

4.10 Studies and projects designed to determine the feasibility of using energy sources



such as wind, solar, peat, and hydro will be supported, provided the project conforms to the policies contained in this program and all other applicable laws.

4.11 Hydroelectric projects will not dam, divert, or draw down rivers, streams, or lakes that support important commercial, subsistence, or recreational fish species unless the project is designed or mitigated so as to cause no net loss to fish production and no interference with navigation.

4.12 Transmission lines will be located, designed, constructed, and maintained in a manner so as to minimize adverse impacts to fish and wildlife populations and habitat. Existing transportation corridors will be used to the extent feasible and prudent. Where this cannot be done, the construction of new lines will avoid creating permanent access corridors and will minimize damage to the land surface.

### **TRANSPORTATION AND UTILITIES (6 AAC 80.080)**

5.1 Restrictions on traditional public access through state and federal land will be minimized. Public access refers to site-specific aspects such as roads, waterways, trails, campsites, and aircraft landing areas, as well as methods of transport. Traditional means include aircraft, three wheeler, boat, snow-machine, dogsled, and foot.

5.2 Projects designed to upgrade existing transportation facilities in the district will be supported, provided the project conforms to the policies contained in this program and all other applicable laws. New roads and other transportation facilities will only be built to support community expansion and resource development. New inter-community roads will not be allowed unless the city or village council in each community to be connected supports such a road.

5.3 New roads will, to the extent feasible and prudent, be located, designed, constructed, and maintained in a manner so as to avoid the loss of critical fish and wildlife habitat and loss or displacement of fish and wildlife populations. River, stream, and lake crossings will be minimized, and measures to maintain bank stability and prevent siltation and pollution of fish habitat will be incorporated.

5.4 All bridges and culverts on fish-bearing streams will be large enough and positioned to avoid changing the direction and velocity of stream flow up to and including annual flood conditions or otherwise interfere with the migration or spawning activities of fish unless it is determined that deviation from this policy will not have a significant impact on fish resources.

5.5 Permits for temporary off-road access will require that surface disturbance and destruction of fragile soils and wetlands be minimized. Operations requiring repeated off-road vehicle use will, to the extent feasible and prudent, avoid caribou calving habitat during

caribou calving and, if deemed appropriate, will be restricted in caribou migration and caribou and moose over-wintering areas during sensitive periods. Restrictions need be applied only when and where it is determined that there are significant populations present. This policy does not apply to local traffic or traditional hunting activities.

5.6 New airstrips will be located, designed, constructed, and operated in a manner so as to minimize physical, visual, and acoustical disturbances to fish and wildlife populations and habitats.

### **FISH AND SEAFOOD PROCESSING (6 AAC 80.090)**

6.1 Projects designed to increase the diversification and development of the district's fishing industry will be supported. The location of additional inshore processing facilities and other support facilities is encouraged, provided the policies contained in, this program and all other applicable laws are adhered to.

6.2 Fish processors, including those based offshore, will conduct their operations in compliance with all state and federal water quality regulations. Those that cannot will not be permitted to operate in the district.

### **TIMBER HARVEST (6 AAC 80.100)**

7.1 In recognition of the fact that there is little commercial forestry potential in the district, the harvest of timber, including commercial harvest, will be conducted only to meet the use needs of local residents.

### **MINING (6 AAC 80.110)**

8.1 Access across public lands for mineral exploration and development activities will be maintained to the extent it conforms to the policies contained in this program and all other applicable laws.

8.2 Recognized exploration methods for mineral location, such as geophysical sampling and core drilling, will be allowed unless otherwise prohibited by law. Bulk sampling will not be allowed in areas closed to mineral entry or in anadromous streams.

8.3 All mining operations will be conducted in compliance with state and federal water quality regulations. Those that cannot do so will not be permitted to operate in the district.

8.4 Sand and gravel extraction from offshore areas, inter-tidal areas, barrier islands, spits, beaches, river beds, floodplains, and other fish habitat will be allowed only where it is determined that:

- a) there will be no significant adverse impact on fish, fish habitat, or fish harvest;
- b) the material is needed for a significant public purpose; and
- c) no feasible and prudent alternative upland site exists.

8.5 Sand and gravel extraction in or adjacent to fish habitat will utilize such measures as levees, berms, and settling ponds in order to avoid adverse impacts to fish and fish habitat. Reclamation and/or rehabilitation measures will be required in order to minimize stream bank erosion and the sedimentation of fish habitat.

8.6 Sand and gravel extraction will be consolidated where feasible and prudent.

8.7 Mining for minerals in or adjacent to fish habitat will utilize such measures as levees, berms, and settling ponds in order to avoid adverse impacts to fish and fish habitat. Reclamation and/or rehabilitation measures will be required in order to minimize stream bank erosion and the sedimentation of fish habitat.

8.8 Mining for minerals in offshore areas will be conducted in a manner so as to avoid:

- a) interfering with commercial fishing activities;
- b) navigation; and
- c) adverse impacts to critical fish and wildlife habitat and the populations utilizing such habitat.

Dredge spoils will be re-deposited in the areas disturbed by dredging unless it is determined that substantial public benefits would be derived from an alternative disposal method. Mining operations that are incompatible with the use of adjacent uplands will not be allowed.

### **SUBSISTENCE (6 AAC 80.120)**

9.1 Traditional subsistence activities are recognized as an extremely important use of the district's natural resources. Subsistence use areas are generally depicted on Map 2 (Volume I). Maintenance of subsistence use will be given the highest priority when approving proposed land uses in these areas, and before a potentially conflicting activity may be authorized, a study of the possible adverse impacts upon subsistence use must be conducted and appropriate safeguards to assure subsistence usage must be provided.

### **HABITATS (6 AAC 80.130)**

10.1 Maintenance and enhancement of fisheries will be given the highest priority when approving projects, which may adversely impact fish spawning, migration, rearing, and overwintering areas. Shorelines that have banks, beaches, and beds critical to fish populations will be maintained in a productive natural conditions.

10.2 Enhancement is an acceptable fish and wildlife management practice where it has been determined to be scientifically sound and where public review shows it to be in the public interest. Maintaining the genetic integrity of wild and indigenous species will be given high priority before approving an enhancement project. All fisheries enhancement and related activities will only use local, indigenous stocks.

10.3 Except for public water supply and domestic use, the maintenance of fish stocks is the highest priority water use in the district. Therefore, an appropriation of water that would cause the in stream flow to fall below the amount determined necessary to protect fish and wildlife habitat and production will not be allowed.

10.4 Water intake pipes used to remove water from fish-bearing waters will require that the intake is surrounded by a screened enclosure so as to prevent fish entrapment and impingement. Pipes and screening will be designed, constructed, and maintained so that the maximum water velocity at the surface of the screen enclosure is not greater than 0.1 foot per second. Screen mesh size will not exceed 0.04 inch unless the Alaska Department of Fish and Game has approved another size. Other technology and techniques, which can be demonstrated to prevent the entrainment and impingement of fish, may also be utilized.

10.5 Projects and activities in wetlands that are hydrologically important to fish will, to the extent feasible and prudent, provide for the maintenance and non-degradation of these areas.

10.6 Channelization, diversion, or damming that would alter the natural hydrological conditions and have a significant adverse impact on critical waterfowl habitat will be avoided to the extent feasible and prudent.

10.7 Public lands designated critical waterfowl habitat will be retained in public ownership. This policy does not apply to land exchanges authorized under the Alaska National Interest Lands Conservation Act (ANILCA).

10.8 In recognition of the fact that large-scale domestic livestock grazing would compete with wildlife populations, the use of public land for large scale grazing operations is prohibited.

**NOTE:** The provisions of 6 AAC 80.130(d) do not apply to policies 10.1, 10.3, 10.4, and

#### **AIR, LAND, AND WATER QUALITY (6AAC 80.140)**

11.1 The quality of fish-bearing waters must, at a minimum, be maintained at a level, which will ensure the continued health and propagation of fish populations. A use or activity, which cannot be conducted in such a manner, will not be allowed.

11.2 No petroleum products or toxic substances will be stored in such form or manner that they could contaminate waterbeds, including groundwater. Measures to prevent and cleanup spills of petroleum or toxic materials will be incorporated into the design and operation of all storage facilities.

#### **HISTORIC AND ARCHAEOLOGICAL SITES (6 AAC 80.150)**

12.1 The historic and archaeological value of an area proposed for development will be evaluated early in a project's planning. If this evaluation indicates that the site contains important historic or archaeological values, archaeologists and qualified members of other relevant disciplines will have an opportunity to study a site prior to construction. Local input must be sought in the evaluation and study phase.

12.2 If a site is determined to be of exceptional historic or archaeological value, it will be protected for future study and enjoyment and considered for placement on the National Register of Historic Places or designation as a State Historical Site.